

DICK GROVE ARRANGING SERIES

# ARRANGING CONCEPTS COMPLETE

by Dick Grove

The Ultimate Arranging Course  
for Today's Music

- 91 Pages of Instrumental Ranges
- Melody Writing
- Solutions to Harmonic Situations
- Breakdowns of Contemporary Styles
- Sample Scores with Recorded Examples
- How to Write the Harmony to  
Make a Small Group Sound Big
- Working Procedures
- A Complete Encyclopedia of Voicings  
...and a Cassette

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for Today's Music



ALFRED PUBLISHING CO., INC.

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**Dedicated to Dee,  
With Love**

**Edited by Joseph Csida  
Cover Design by Joice Simpson**

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## FOREWORD

For many years I have felt that there has been a great need for an easy to understand book on arranging.

The popularity at all levels of education has helped make literally hundreds of thousands of young musicians and many of their teachers and directors very aware of, and interested in, writing for these same bands.

By the same token, a great number of other musicians not involved in school music programs have come to be quite conscious of arranging. Not only in the jazz field, but in many small rock and jazz/rock groups.

This book is meant to serve as both a reference book and as a structured learning approach for any musician who has an interest in arranging.

It has been my observation, based on years of writing and teaching, that the basic problem facing any beginning arranger is the lack of conception and judgment which shapes any well written arrangement.

Learning ranges and transpositions of instruments and a few obvious section voicings only scratch the surface of what really needs to be understood.

This understanding of the real musical values explains why the writing of an experienced professional "comes off," in marked contrast to most early attempts by the great majority of beginning writers.

The beginning arranger may write an introduction, chorus, background figure or ending just as the professional does. However, the professional chart comes out polished and musical while the other is usually overwritten, choppy and lacks development and consistency of style.

It is my belief then, that a student of arranging needs a guided approach through the many facets which make up the various elements of a well written arrangement.

This approach should, at the same time, place the proper emphasis on the "key" factors, so that the beginning arranger finally has a maximum opportunity of mixing knowledge and technique with his own inherent talent to produce well written, satisfying music.

Many young writers become discouraged by what seems to them a lack of accomplishment. They may spend ten times the amount of time really needed working out their arrangement (this because of self-doubt) and when the chart does not "work," the tendency is to lose interest.

Their reaction is understandable, but I feel with more complete, balanced foundation in arranging techniques and skills it need not happen.



### MUSICAL EFFECT

All arranging is really the art of being able to CONCEIVE a MUSICAL EFFECT and then TRANSFER it to paper so that that particular effect comes alive.

Every combination of instruments, every style of music or every thematic fragment produces an effect on the listener. You are indeed headed for a dead end street if you write any part of an arrangement without being aware of what the listener's reaction is going to be. You must be able to gauge the reaction at the time you write the arrangement.

Many musicians spend their lives listening to one arrangement after another without being aware of what they have heard IN TERMS OF EFFECT AND REACTION.

It is this awareness of effect, which in turn helps the arranger to make his countless decisions and draw the conclusions that are needed.

This overall conception is most important. The process of judging an idea against a pre-set conception is the process which tells the arranger – if nothing else – what NOT to write. An arrangement is cohesive and flowing if all the musical ideas in the arrangement are consistent with the overall concept.

It is also my belief that a beginning arranger needs an effective reference source which specifically details the actual working problems that come up in the course of writing any arrangement.

This availability of solutions to basic problems, plus as comprehensive as possible a coverage of all the elements of arranging should give the writer the opportunity to mix his own level of talent with this acquired and essential knowledge and technique.

Hopefully, after you have this foundation you should be able to build solidly and evolve naturally into your own style and approach to the more advanced areas of arranging.

This book attempts to cover all the basic and intermediate points involved with writing for stage band and jazz/rock combinations.

We will briefly look at some of the more advanced areas not so much to try to cover them, but to make you aware of what they are and thus open the door to the future acquisition of their sounds and effects.

Perhaps the most basic premise that any young writer should be aware of is the importance of the rhythm section in relationship to the band.

The first conclusion to arrive at is the fact that when the rhythm section is playing, you have in effect a self-contained, finished musical product.

A rhythm section, of course, could play for an entire arrangement all by itself — or all night — and nothing would be musically lacking or missing for the rhythm section is a complete section within itself. A rhythm section, in short, is a complete small band.

To have the rhythm section playing and ten brass and five saxes NOT playing could be the most musical and logical solution to a certain situation.

Once you realize that there is no compelling force requiring you to fill up the score pages with brass and saxes constantly playing, you have taken the first important step to a comprehension of what "conception" really means.

This book will not go into detail on the subjects of basic harmony and theory. These subjects are covered in many harmony books. However, if at any point in the study of this book or in the writing of an arrangement you find yourself confused or unknowledgeable on a point of harmony or theory, do not let it go unresolved.

I would suggest checking books or sources you might have on the subject, or with a fellow musician who can fill you in.

I also suggest that you refer to **FUNDAMENTALS OF HARMONY — Parts 1 & 2** and **MODERN HARMONIC RELATIONSHIPS — Parts 1 & 2**.

These books include very comprehensive coverage of basic harmony and theory for the arranger, as well as for the instrumentalist for whom they are primarily intended.

However you use this book, as a reference book for isolated points you wish to cover, or as a total approach towards arranging, I wish you much success. Remember, you get as much out of writing as you put into it. As an instrumentalist we think nothing of practicing years to perfect our facility to play well. In the same way, writing needs a commitment of time and energy to arrive at a mastery of musical conception and of the techniques and knowledge required.

Good notes —————

Dick Grove



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## IMPORTANT REFERENCE CODE

SC . . . . . Whenever SC appears alongside an example, it means that that particular example may be heard on a Supplementary Cassette, especially recorded as an audio reference work for this book. Most of the examples are recorded by various Big Bands, but Dick plays some on piano. This book, of course, stands on its own, but you may find the recorded examples a very valuable *additional* learning device. See Page 435 for complete details.

## SECTION I – THE TECHNICAL FOUNDATION

### Chapter 1: Ranges, Transpositions, Characteristics and Restrictions of Instrument Families

- 1) This chapter will define the ranges, transpositions, general characteristics and restrictions of the more available instruments comprising today's big bands and jazz/rock ensembles.

Each instrument family will be detailed. Although this information can always be used as a reference source, it is the arranger's obligation to become familiar with and relate to the specifications of *all* the instruments as soon as possible.

- 2) It is suggested you ask musicians playing instruments that you are not familiar with, specific questions regarding inherent weaknesses of their instruments. Make it your business to gain a realistic knowledge of them all.
- 3) I should add that I have not attempted to go into the characteristics of some of the newer synthesized and electronic instruments such as the Moog Synthesizer and any number of other rather more extreme electronic devices. I am still in the process of studying the devices in this category, which seem to me worthwhile, and they are quite rare in the overall big band and average jazz/rock or pop group even today.

#### THE SAXOPHONE FAMILY

- 4) Saxophones, as a family, function as a flexible section of the band. The blending character of the saxophone helps to give our jazz and jazz/rock ensembles their unique sound.
- 5) Many stylistic effects can be produced on the various saxes, such as slurs, degrees of vibrato, no vibrato, fall offs, bending of notes, staccato and sforzando attacks. Saxes have a distinct ability to articulate and blend with the brass section.
- 6) Saxes are capable of very fast arpeggios, scale runs, skips and leaps.
- 7) The saxophone family consists of:
  - Bb Soprano Sax
  - Eb Alto Sax
  - Bb Tenor Sax
  - Eb Baritone Sax
  - Bb Bass Sax
- 8) You will be shown each instrument's **CONCERT RANGE** (where it actually sounds) and its **TRANSPOSED** or **WRITTEN RANGE**. Each instrument in the saxophone family has the same written range.

Ex. #1





THE Bb SOPRANO SAXOPHONE

- 9) The soprano sax is finding an increasing acceptance as a jazz-oriented color in recent years as a solo instrument, lead over the sax sections, and as an alternate for the clarinet in the woodwind section.
- 10) The soprano sax is a transposing instrument with a CONCERT or SOUNDING RANGE of:

Ex. #2



and a WRITTEN RANGE of:

Ex. #3



This means that any concert pitch on piano is written a WHOLE STEP HIGHER. The key signature is also a whole step higher than the concert key.

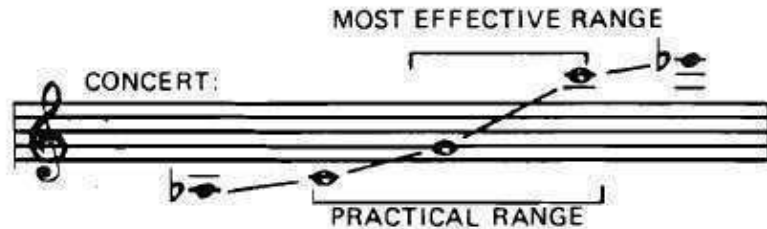
Ex. #4

WRITTEN:

SOUNDS:

11) TONE QUALITY RANGE:

Ex. #5

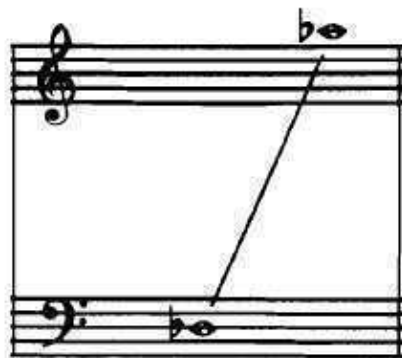


- 12) CHARACTERISTICS: The soprano sax has a definite jazz quality. The tone can vary from a soft, sweet sound, to a very edgy, shrill effect. It is also very much in character in dixieland, music of the 20's and 30's, and in the jazz/rock idiom.
- 13) RESTRICTIONS: The less experienced the player, the more intonation will be a problem. The lowest four notes on the instrument are quite dense, however, the next two octaves are quite practical. The top five notes require an experienced player to play them in tune.
- Having a lighter tone and timbre than the other saxes, a good balance is dependent on the other saxes playing softer, especially when the soprano has lead over the section.

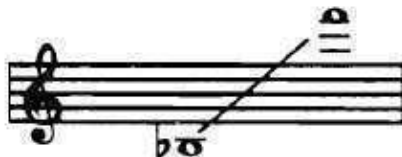
THE E<sub>b</sub> ALTO SAXOPHONE

- 14) The alto sax is a transposing instrument with a CONCERT OR SOUNDING RANGE of:

Ex. #6

and a WRITTEN RANGE of:

Ex. #7



#### 4 ARRANGING CONCEPTS

- 15) The alto sax is written a Major 6th interval ABOVE its concert pitch.

Ex. #8



- 16) TONE QUALITY RANGE:

Ex. #9



- 17) CHARACTERISTICS: The alto sax is an accepted jazz solo instrument, having a brilliance and fire that is very exciting. Its value in the sax section and its ability to blend with the trumpets make it one of the more vital instruments in the band.
- 18) RESTRICTIONS AND CONSIDERATIONS: The alto is an extremely flexible instrument that can handle fast scale and arpeggio passages with ease. As Example 9 shows, the lower four notes on the alto are not orchestrally practical, having a muddy, dense quality. The next 5th interval is effective in unison and as inner harmony voices. The fullest and most effective range is the next octave and a 4th.
- 19) When choosing a key for a sax section soli, this span should be the determining factor. The top third is quite piercing and brilliant. The extreme top has to be carefully considered for intonation reasons.



#### THE Bb TENOR SAXOPHONE

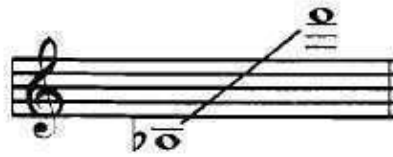
- 20) The tenor sax is a transposing instrument with a CONCERT OR SOUNDING RANGE of:

Ex. #10



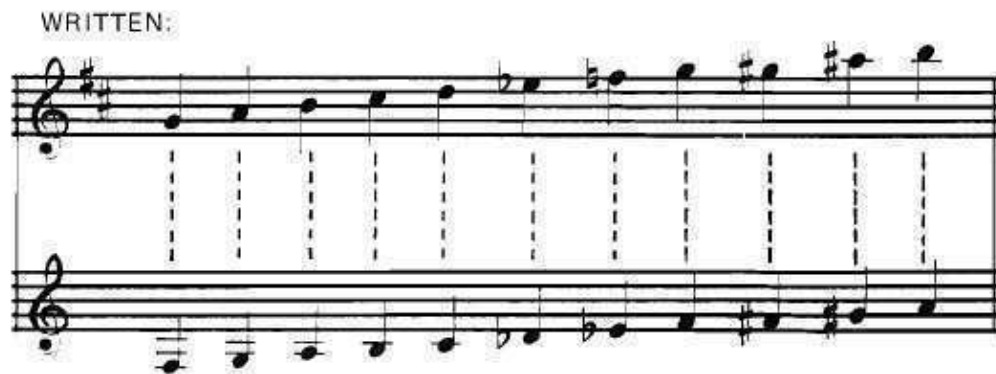
and a WRITTEN RANGE of:

Ex. #11



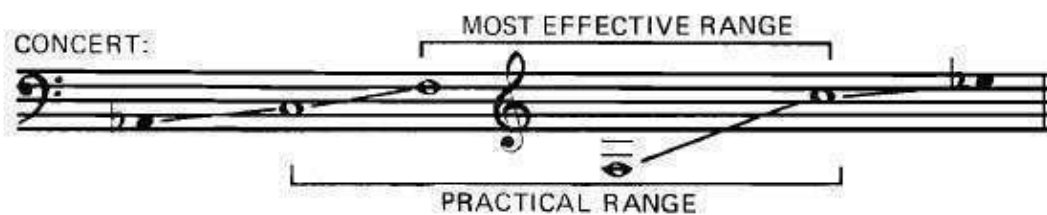
- 21) The tenor sax is written a Major 9th interval (an octave and a whole step) above its concert pitch.

Ex. #12



- 22) TONE QUALITY RANGE:

Ex. #13



- 23) CHARACTERISTICS: The tenor is also a basic jazz and jazz/rock solo instrument. It also provides the body of the sax section. It is used as tenor lead and blends nicely with low brass. It is pitched a 4th lower than the alto sax and an octave lower than the soprano sax.
- 24) RESTRICTIONS AND CONSIDERATIONS: Like the soprano and alto, the tenor is quite agile and flexible. The bottom four notes (see Example 13) of its range are quite dense but are sometimes used in certain solo styles with a "honking" gutty effect (the low Ab). The next 4th interval in its range is practical for unison passages and as an inner harmony voice. The next octave and a half is the most effective. Any tenor lead should be kept within this span. The top third interval requires a mature player to play in tune.





THE E $\flat$  BARITONE SAXOPHONE

- 25) The baritone sax is a transposing instrument with a CONCERT or SOUNDING RANGE of:

Ex. #14



and a WRITTEN RANGE of:

Ex. #15



- 26) The baritone is written a Major 13th interval (a major 6th plus an octave) ABOVE its concert pitch. This is the same as the alto sax, plus an octave.

Ex. #16

WRITTEN:

SOUNDS:

- 27) Because the concert pitch is always written in the bass clef, the diatonic transposition of the baritone is AUTOMATIC IF THE CLEF IS SIMPLY CHANGED TO THE TREBLE CLEF:

Ex. #17



becomes:

Ex. #18

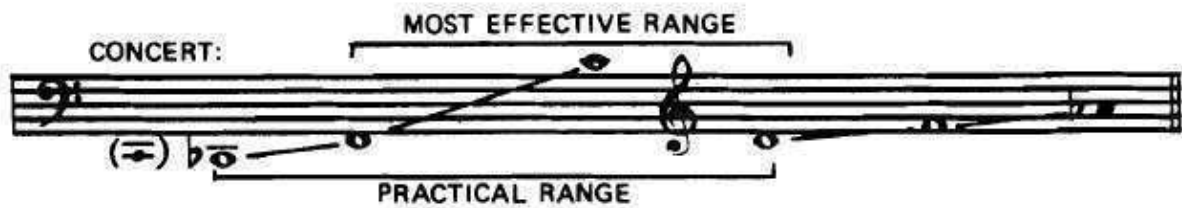


The key signature would also change from the concert key to the baritone key, a minor third lower (i.e., F to D).

Always check accidentals to be sure you have the *Major* 13th interval.

28) TONE QUALITY RANGE:

Ex. #19

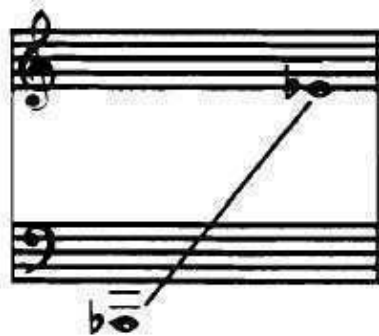


- 29) CHARACTERISTICS: The baritone is now accepted as a conventional and exciting solo jazz instrument. It functions as the bottom voice of the sax section and is often used with the trombone section against the remaining saxes or trumpets on low rhythmic patterns, bass lines and pedals. It can function as an independent instrument on fills and glisses as the bottom voice of the sax section. Being pitched an octave lower than the alto and fifth lower than tenor, it speaks somewhat slower, but can be considered a consistent part of the section rhythmically.
- 30) RESTRICTIONS AND CONSIDERATIONS: The low concert "C" (shown in parentheses in Ex. 19) is possible only on baritones fitted with a special low "A" key. You cannot assume it to be available. The next four notes in its range are very strong and full due to the extreme end of its register. However, use of these notes often will not blend and this possibility should be taken into consideration. The next octave and a half is the most effective and blending span. The next four notes begin to lose their body and they should be used with considerable caution. The top three notes should be avoided orchestrally.

THE Bb BASS SAXOPHONE

- 31) The bass sax is a transposing instrument with a **CONCERT** or **SOUNDING RANGE** of:

Ex. #20

and a **WRITTEN RANGE** of:

Ex. #21



- 32) The bass sax is written two octaves and a Major 2nd interval above its CONCERT PITCH.  
(This is the same as the tenor sax plus an octave.)

Ex. #22

WRITTEN:

SOUNDS:

- 33) TONE QUALITY RANGE:

Ex. #23

CONCERT:

MOST EFFECTIVE RANGE

PRACTICAL RANGE

- 34) CHARACTERISTICS: The bass sax is a slow speaking instrument that should not be thought of as equal to the other saxes in terms of agility, endurance and flexibility. The bass sax is used for such effects as pedal points, reinforcing the bass notes (staccato) or bass lines (legato).
- 35) RESTRICTIONS AND CONSIDERATIONS: The bottom five notes of its range have a tremendous sound. The next octave and a half is its most effective range. The top five notes thin out and their effectiveness lessens. There should be a real orchestral reason for using the bass sax, as its misuse can produce a very muddy effect.

### SUMMARY

- 36) You should relate each instrument in the entire saxophone family to its representative range relationships.

Ex. #24

OCTAVE

OCTAVE

OCTAVE

CONCERT:

BASS

BARY

TENOR

ALTO

SOP

4TH

5TH

4TH

5TH

SAX SECTION COMBINATIONS

- 37) Instruments from the saxophone family can be voiced or combined in a variety of ways. Below are listed the voicings that are acceptable combinations:  
(The bass saxophone would be an optional double on any of the baritone chairs shown below.)

a) alto (sop.) alto tenor tenor bary bary	b) alto (sop.) tenor tenor tenor bary bary	c) alto (sop.) alto tenor tenor (bary) bary	d) alto (sop.) tenor tenor tenor bary	e) alto (sop.) tenor tenor bary bary
f) tenor (sop.) tenor tenor bary	g) alto (sop.) alto tenor bary	h) alto (sop.) tenor tenor bary	i) alto (sop.) alto tenor tenor	j) alto (sop.) tenor bary
k) tenor (sop.) tenor tenor	l) tenor (sop.) tenor bary	m) alto tenor	n) tenor tenor	o) tenor bary

THE WOODWIND FAMILY

- 38) Woodwinds provide the color and variety to an orchestration. Intonation is always a consideration, since many proficient saxophone players have not developed a fully similar facility on one or more of their particular woodwind doubles.
- 39) The standard doubling breakdown applies to the sax section in this fashion:
- 1st Alto: doubles piccolo, "c" flute and clarinet
  - 2nd Alto: doubles "c" flute and clarinet (possibly piccolo)
  - 1st Tenor: doubles clarinet (possibly oboe and English horn)
  - 2nd Tenor: doubles clarinet
  - Baritone: doubles bass clarinet, clarinet (possibly bassoon)
- 40) Doubles such as the alto flute and bass flute are possible on any chair, obviously dependent on the individual players. The soprano sax is typically doubled on the 1st alto or one of the tenor chairs. The bass sax is usually on the baritone chair.

SPECIAL NOTATION

- 41) It is typical of woodwind instruments to employ special DOUBLE and TRIPLE TONGUING effects when notes become too rapid for normal single tonguing. The most typical situation always involves REPEATED NOTES.

DOUBLE TONGUING:

Ex. #25

WRITTEN:



Ex. #26

SOUNDS:

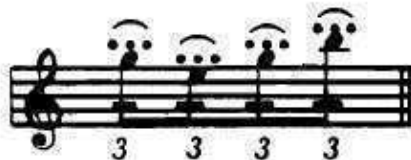




## TRIPLE TONGUING:

Ex. #27

WRITTEN:



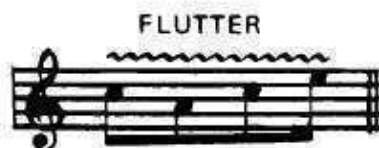
Ex. #28

SOUNDS:



- 42) A "FLUTTER TONGUING" effect (sounds like "drrrr") can be notated by (1) either a continuing horizontal wavy line with the indication "flutter" (see Ex. 29) or by (2) Tremolo notes with the same word indication "flutter" written above (see Ex. 30).

Ex. #29



Ex. #30

THE PICCOLO

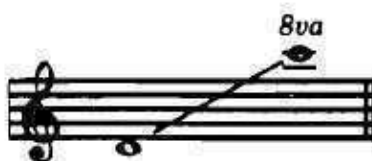
- 43) The piccolo is a non-transposing instrument. It has a SOUNDING range of:

Ex. #31



and a WRITTEN RANGE of:

Ex. #32



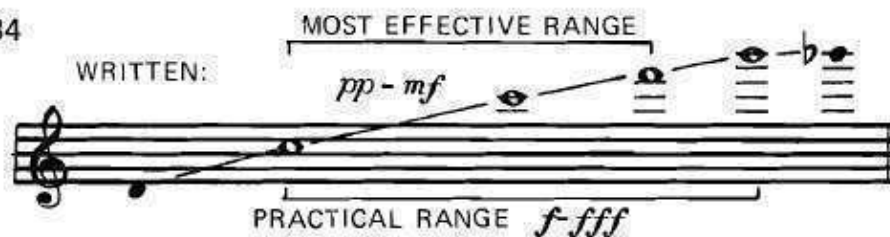
- 44) The piccolo or "small flute" sounds AN OCTAVE HIGHER THAN WHERE IT IS WRITTEN.

Ex. #33



- 45) TONE QUALITY RANGE:

Ex. #34



- 46) CHARACTERISTICS: The piccolo is exceptionally facile in general, and with scalewise passages in particular. It lacks the warmth of the "c" flute, but used orchestrally it is valuable not only with the woodwinds but in doubling lead trumpet in high ensemble passages. Its penetrating, piercing sound can balance and cut through the brass and adds a unique quality to the ensemble.
- 47) RESTRICTIONS AND CONSIDERATIONS: The piccolo has all the agility of the "c" flute but a shorter effective range (see Ex. 34). The bottom octave has a very limited usage and value, however, the next octave is quite good for solo work. Above high "c", the tone becomes increasingly shrill, requiring mature musicians to insure good intonation.



### THE "C" FLUTE

- 48) The "C" Flute is a non-transposing instrument. Its written and sounding range is the same.

Ex. #35

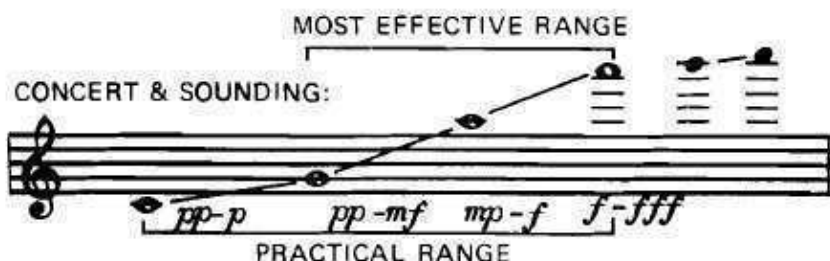


Ex. #36



49) TONE QUALITY RANGE:

Ex. #37



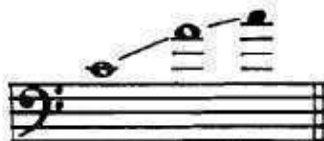
- 50) CHARACTERISTICS: The "C" flute is the most effective color available in the normal woodwind complement. Like the piccolo, its agility is only limited by the individual player's ability. Its blending qualities are very useful not only with the woodwind section, but as a doubled lead an octave over trumpets written in a range of:

Ex. #38



and over trombones in a range of:

Ex. #39



- 51) RESTRICTIONS AND CONSIDERATIONS: The double and triple tonguing effects are all valid on flute, but the FLUTTER-TONGUE (see Exs. 29 and 30) is more practical in the higher portion of its range. The bottom 5th of the flute is a very breathy, warm sound. It is usually best to "mike" solos in this register to attain a good balance against other instruments. The next octave is quite pretty and a louder dynamic range is possible.

Continuing above the staff, the tone becomes thinner and can be played to double forte levels. The top "B" and "C" of the flute is thinner, shriller and louder. Again, as in most extreme usages of a register, only experienced players can handle the intonation problems.

THE ALTO "G" FLUTE

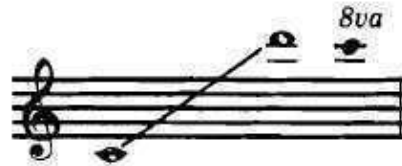
- 52) The alto flute is a transposing instrument. It has a CONCERT or SOUNDING RANGE of:

Ex. #40



and a WRITTEN RANGE of:

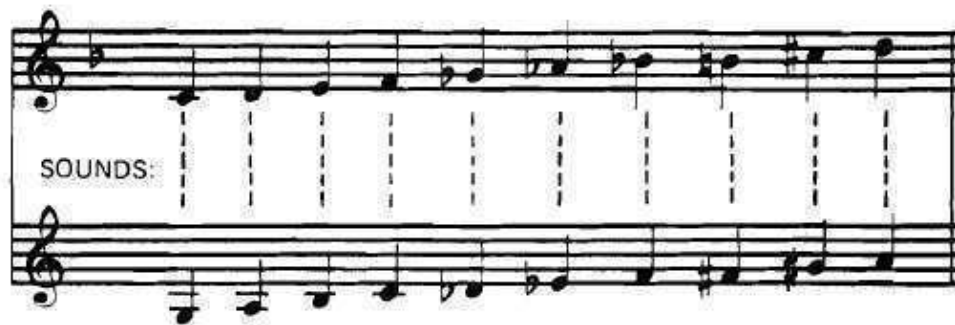
Ex. #41



- 53) It is written a PERFECT 4th interval ABOVE its CONCERT PITCH and the key signature has the same relationship.

Ex. #42

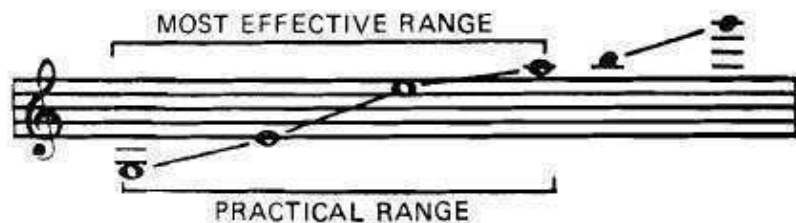
WRITTEN:



- 54) TONE QUALITY RANGE:

Ex. #43

CONCERT:



- 55) CHARACTERISTICS: The alto flute has a beautiful lush tone. It is a valuable color not only because it makes available the additional fourth below the "C" flute range, but because all of its lower range produces a more stable quality than the "C" flute. Its lowest tones, producing a velvet, dark timbre are particularly effective for "miked" solos and unison passages. The alto flute sound is used to great advantage when orchestrating bossa nova and ballad styles.
- 56) RESTRICTIONS AND CONSIDERATIONS: The alto flute has the same flexibility as the "C" flute, but being a larger flute, it uses more air to produce the sound. This can be a factor in long sustained phrases and when combined with "C" flutes. The bottom octave produces the more individual quality usually associated with the alto flute. The next octave becomes more similar to the "C" flute. The practical range should not exceed the concert "A" above the staff.

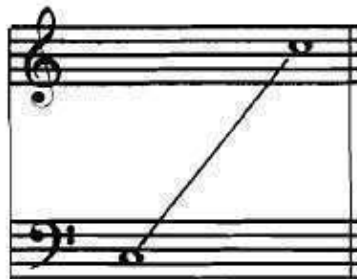




### THE BASS FLUTE

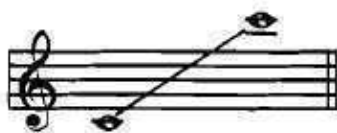
- 57) The bass flute is a non-transposing instrument. It is written in treble clef and sounds an octave lower than written. It has a **SOUNDING RANGE** of:

Ex. #44



and a **WRITTEN RANGE** of:

Ex. #45



- 58) Example 46 illustrates the **OCTAVE RELATIONSHIP** between the **WRITTEN** and **SOUNDING** RANGES.

Ex. #46



- 59) **TONE QUALITY RANGE:**

Ex. #47



- 60) **CHARACTERISTICS:** The bass flute is an extremely quiet instrument requiring amplification to achieve an effective balance with other instruments. It has a colder, mysterious sound and is usually orchestrated in solo situations. It is a slower speaking instrument than the other flutes and requires a great deal of air.
- 61) **RESTRICTIONS AND CONSIDERATIONS:** It is best to be very aware of the endurance requirements when scoring long sustained passages. The bottom octave is the most effective range because of its uniqueness. The next octave and a half continues its effective range. The last half octave is not practical and should be avoided.

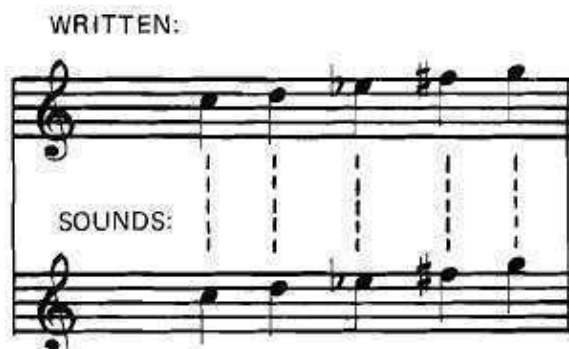
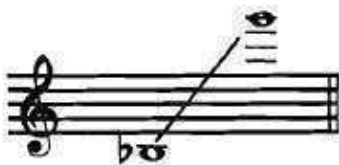


### THE OBOE

- 62) The oboe is a non-transposing instrument. Its **WRITTEN** and **SOUNDING** RANGES are the same.

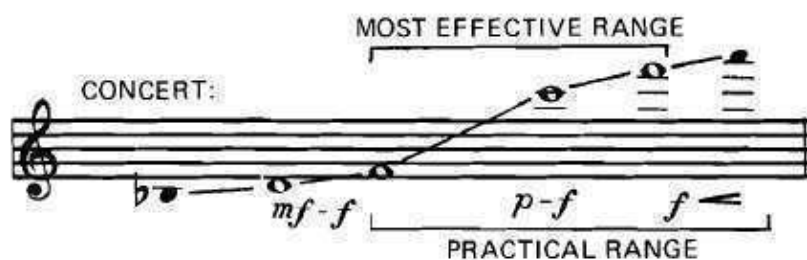
Ex. #48

Ex. #49



- 63) TONE QUALITY RANGE:

Ex. #50



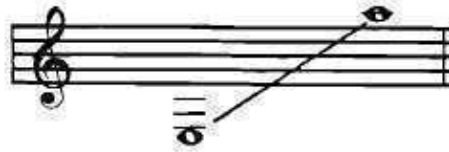
- 64) **CHARACTERISTICS:** The oboe differs from the flute and clarinet families, being a "DOUBLE-REED" instrument. Its qualities are warmth and intensity, with a unique nasal sound. It is a valuable solo instrument with a very distinct character. It is used with the flute and clarinets, for example, doubling lead an octave below the flute. Its penetrating quality does not allow it to balance as easily with the other woodwinds when written as an inner harmony part. It is better used on lead, doubled lead or a consonant harmony part. It can also be orchestrated with trumpets.
- 65) **RESTRICTIONS AND CONSIDERATIONS:** The oboe is a fast speaking horn. The first four notes are not too consistent as they are hard to play in tune. The lowest part of its range is quite dense. The "D" below the staff to high "C" provides the most practical and expressive span. Solos should be confined to this range. The next fourth span becomes thin and shrill and is best to avoid. The last two notes should be avoided completely.



### THE ENGLISH HORN

- 66) The English horn is a double-reed transposing instrument. It has a **CONCERT** or **SOUNDING RANGE** of:

Ex. #51



and a **WRITTEN RANGE** of:

Ex. #52



- 67) It is written a perfect 5th interval **ABOVE ITS CONCERT PITCH** and the key signature has the same relationship.

Ex. #53

**WRITTEN:**

**SOUNDS:**

- 68) **TONE QUALITY RANGE:**

Ex. #54

**CONCERT:**

**MOST EFFECTIVE RANGE**

**PRACTICAL RANGE**

- 69) **CHARACTERISTICS:** The English horn is a very expressive solo instrument with somber, brooding qualities. It has less agility than the oboe, due to its deeper pitch and larger size.
- 70) **RESTRICTIONS AND CONSIDERATIONS:** The lowest octave and a half is the most used register. The next 6th span thins out and is seldom used. Its relationship to the oboe in the woodwind family corresponds to the relationship between the "C" flute and the alto flute.



### THE BASSOON

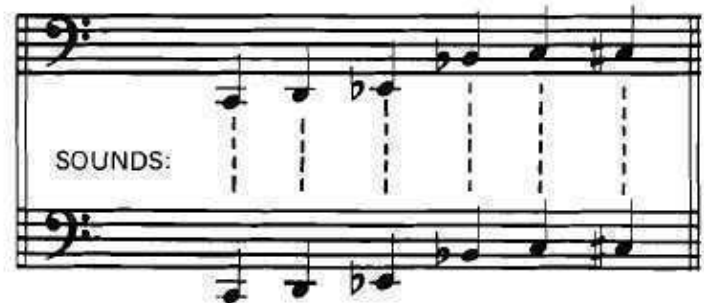
- 71) The bassoon is a non-transposing instrument. It is written in the bass, tenor and treble clefs. The tenor clef being used instead of the treble clef for the top portion of the range.
- 72) The bassoon has a SOUNDING and WRITTEN RANGE of:

Ex. #55



Ex. #56

WRITTEN:



- 73) TONE QUALITY RANGE:

Ex. #57



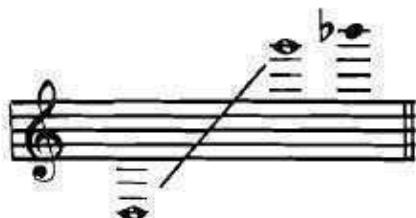
- 74) CHARACTERISTICS: The bassoon has a variety of effects and can be used to suggest both humor and the macabre. It is quite mobile, handling arpeggios, leaps, trills and scalewise movements with ease. The bassoon is noted for its hard staccato which can be executed quite rapidly.
- 75) RESTRICTIONS AND CONSIDERATIONS: The first octave has the greatest power, ranging from mezzo forte to double forte. It has very rich qualities and a dense sound. The next octave becomes weaker and the intensity of its tone is less. The next fifth span of its range becomes more piercing and harsher, with the top fifth changing to a mellow and delicate flavor.



THE Bb CLARINET

- 76) The clarinet is a transposing instrument. It has a **CONCERT RANGE** or **SOUNDING RANGE** of:

Ex. #58



and a **WRITTEN RANGE** of:

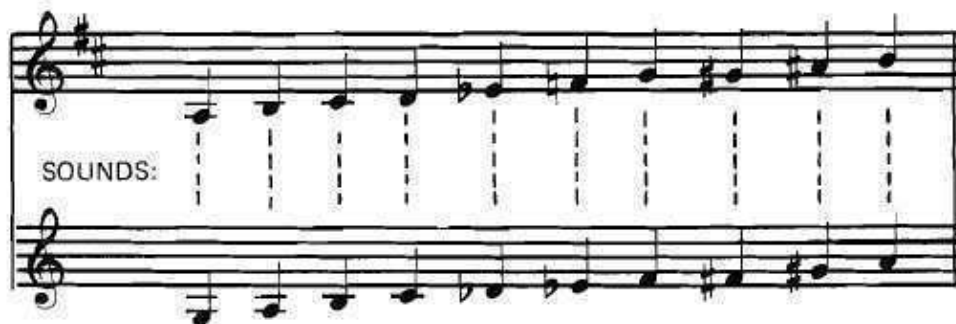
Ex. #59



- 77) It is written a whole step **ABOVE** its **CONCERT PITCH**, and the **KEY SIGNATURE** has this same relationship.

Ex. #60

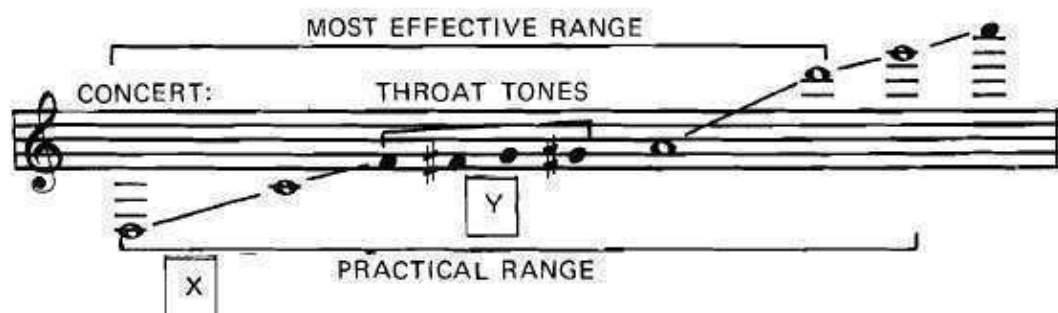
WRITTEN:



SOUNDS:

- 78) TONE QUALITY RANGE:

Ex. #61





- 79) **CHARACTERISTICS:** The clarinet has a woody, special quality. This woodwind double, more than the others, is more available in the average woodwind section. It is capable of great flexibility in scales and chromatic runs as well as glisses, tremolos and, of course, arpeggiated passages. Along with providing the body of the woodwind section, it blends nicely with both muted and open brass, both as a section and in mixed solis.
- 80) **RESTRICTIONS AND CONSIDERATIONS:** The lowest portion of the clarinet range (see reference point X, Example 61) has a very soft and delicate quality. This is referred to as the SUB-TONE or CHALUMEAU. It is most effective in a solo or exposed situation. Reference point Y of Example 61 refers to the "break, bridge, or throat tones." It is more difficult to move from a throat tone note to a tone above (i.e., G - C).

Ex. #62



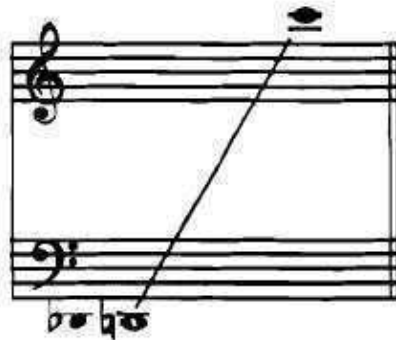
- 81) This should be considered, and involved passages in and crossing through this area should be used cautiously, although more talented and experienced players can handle this problem remarkably well. The next octave is brilliant, clear and flexible. Above the high "C," intonation becomes an important factor and is usually not considered a safe range.



### THE Bb BASS CLARINET

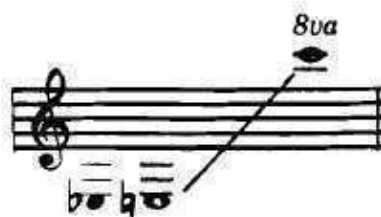
- 82) The Bb bass clarinet is a transposing instrument. It has a CONCERT or SOUNDING RANGE of:

Ex. #63



and a WRITTEN RANGE of:

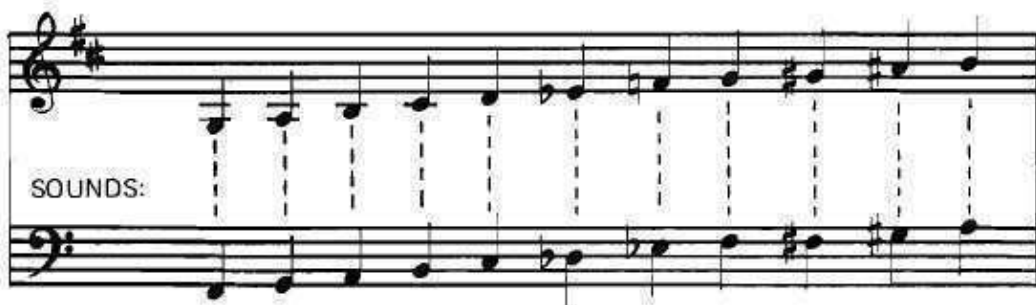
Ex. #64



- 83) It is written in the treble clef, a Major 9th interval ABOVE its CONCERT PITCH (like the tenor sax). The KEY SIGNATURE has a relationship of a WHOLE STEP ABOVE the CONCERT KEY.

Ex. #65

WRITTEN:



- 84) TONE QUALITY RANGE:

Ex. #66



- 85) CHARACTERISTICS: The bass clarinet sounds an octave lower than the Bb clarinet and has somewhat less agility than the clarinet. It is the "foundation" of the woodwind section and is often used with muted and open trombones, guitar and bass. Its rich quality is strongest in its bottom octave and is still effective up to middle "C."
- 86) The same considerations and problems exist with the throat tones (i.e., G to C) on bass clarinet as described on clarinet in paragraphs 80 and 81, Example 62.  
Glisses and pedal effects are very useful. It is capable of great definition in sforzando attacks as well as the staccato attack.
- 87) Above middle "C," the tone thins out and passages in this upper register are orchestrated better and more naturally with the Bb clarinet. The top 4th of its range should be avoided entirely. Being a slower speaking instrument than the clarinet, extremely technical demands should be avoided. Some bass clarinets are outfitted with an extra key, making the low concert Db available. This cannot be assumed however, without checking with specific players.

### THE Bb CONTRA BASS CLARINET

- 88) The Bb contra bass clarinet is a transposing instrument identical to the Bb bass clarinet in WRITTEN RANGE and SOUNDING AN OCTAVE LOWER THAN THE Bb BASS CLARINET.
- 89) All other factors are the same except that it is a slower speaking instrument and should be utilized mainly for very special situations such as pedals and as a foundation for the woodwind and trombone sections.

### THE BRASS FAMILY

- 90) The brass family of instruments contribute the strength, range and excitement that provides the climactic punch as well as the full body of the orchestration of a jazz or rock chart. The brass instruments are capable of great rhythmic definition, a full range, legato "brass choir" pads plus the addition of colors provided by the use of the various mutes.
- 91) The use of brass (which requires a developed physical degree of endurance and stamina) can easily be abused. Typically, this happens when an inexperienced writer "thinks" pianistically instead of from a blowing standpoint. A standard procedure of always considering WHERE the brass will breathe is, of course, very important.
- 92) Great consideration should be given to the AMOUNT of high brass used in an arrangement. Extremely high or sustained high brass is only effective IN CONTRAST TO A LOWER LEVEL OF BRASS WRITING. An arrangement that starts high and continues, ceases to mean anything because of the lack of a comparative level.

### VARIATIONS OF OPEN BRASS

- 93) The following mutes are all in common use and their specific effects and colors should be well known.
- 94) The CUP MUTE has good blending qualities, producing a soft and mellow sound. It is the least individual of the mutes.
- 95) The STRAIGHT MUTE has a piercing, biting narrow effect. Although this mute used to be characteristic of Latin-American music, it now is commonly used in jazz orchestration, often mixed with woodwinds and contrasting mutes in the brass.
- 96) The HARMON MUTE is the most individual of the available mutes. It has an intense, filtered and distant effect but can be heard through an ensemble because of its piercing qualities. It can be used with the stem pulled out a distance of two to three inches or removed entirely.  
  
Extremely high and low ranges using mutes should be avoided. High muted trumpets require even more air and add to endurance problems. Each of these mutes can be used for a section (trumpets, trombones) or mixed between the available instruments.
- 97) The HAT broadens and rounds out the brass sound, reducing the edge and piercing qualities. It is often referred to in "quasi horn" sustained organ passages. When hats are not available, a substitute effect is the indication "IN STAND." The player points his horn into the stand in front of him, directing the sound against the stand, achieving a more muffled sound.
- 98) An even more muffled blending effect is the use of the BUCKET. Much of the low brass BASIE sound is achieved with the BUCKET. It is effective in a range restricted to the staff.
- 99) THE PLUNGER is the most obvious of these brass effects. A rubber plunger is held over the opening of the bell, and is alternated between a closed (+) position and an open (o) position.

Ex. #67



This same "open-closed" approach can be used with a hat or hand.

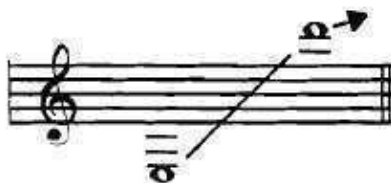
- 100) Trombones are sometimes instructed to place their hand over the bell. The indication "H.O.B." means "HAND OVER BELL," and achieves much the same effect as IN STAND or the use of the hat.
- 101) Always consider how much time you are allowing the player to install or remove the mute or bucket. This cannot always be determined by the number of measures, as two measures in a fast tempo can be one second, compared to eight seconds in a ballad tempo. Five seconds is the ideal SHORTEST TIME TO ALLOW.
- 102) The change from a mute or any special effect is always indicated by the instruction OPEN.
- 103) One should realize that the upper limit of the brass instruments is always dependent on the individual player. You cannot assume an unknown lead trumpet can play a high "G," simply because your melodic idea takes you there.
- 104) Various brass effects and articulations (such as the shake, gliss, fall off, etc.) are detailed in the ARTICULATION TABLE 10 in Chapter 4.
- 105) Typical brass sections can be made up of from three trumpets and two trombones (in big bands) to five trumpets, four French horns, five trombones and tuba. Rock instrumentations can come down to much smaller brass representations.



### THE B $\flat$ TRUMPET

- 106) The B $\flat$  trumpet is a transposing instrument with a CONCERT RANGE of:

Ex. #68



and a WRITTEN RANGE of:

Ex. #69



- 107) It is written a whole step ABOVE its CONCERT PITCH and its key signature has the same whole step relationship.

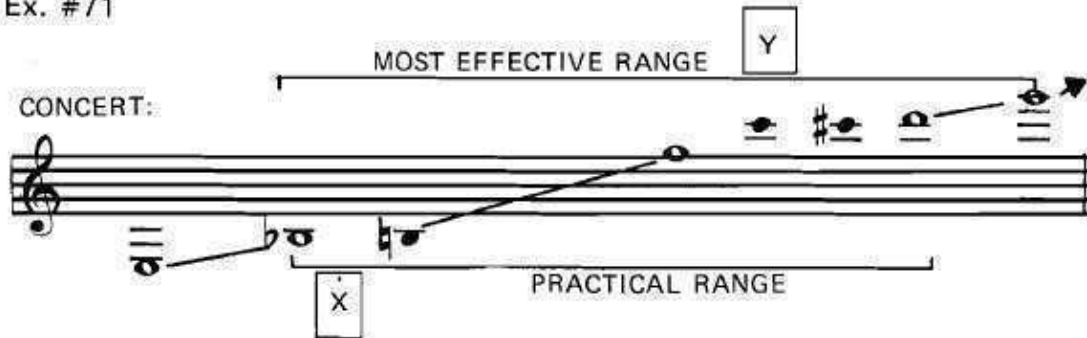
Ex. #70

WRITTEN:



108) TONE QUALITY RANGE:

Ex. #71

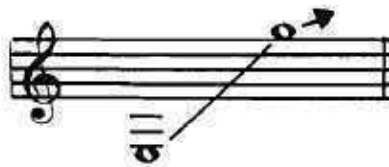


- 109) CHARACTERISTICS: The trumpet is the most agile of the brass family. It does not have the fluency of the woodwinds or of the saxes, but nevertheless is quite flexible. All forms of attack are possible on trumpet with great definition, including hard and soft staccato, legato, portamento. (See ARTICULATION TABLE 10, Chapter 4.)
- 110) The wide range of mutes, buckets, hats, etc., plus stylistic nuances, give the trumpet a variety of possibilities and effects.
- 111) RESTRICTIONS AND CONSIDERATIONS: It is best to avoid wide leaps of over an octave. The considerations of endurance, range, etc., have already been discussed and must be kept in mind. The lowest 5th interval of the trumpet range is not practical for orchestral and sectional use. Some 4th trumpet parts will go to low concert "G" and "A," but these tones are not as effective on trumpet as they would be on flugelhorn or trombone.
- 112) The next two octaves are considered the best playing range. Reference point X in Example 71 refers to the low concert "B" natural. This is very difficult to play in tune, and consideration should be given this fact when using it in unison passages. Reference point Y in Example 71 refers to two more concert pitches that are quite difficult to play in tune, especially with younger players. The top portion of the trumpet range is, of course, dependent on the player. Realistic use of this span is essential.

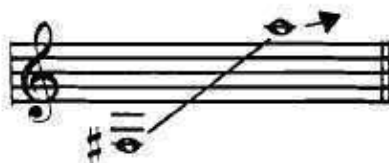
**THE FLUGELHORN**

- 113) The Bb flugelhorn is a transposing instrument like the trumpet. It has a **CONCERT RANGE** of:

Ex. #72

and a **WRITTEN RANGE** of:

Ex. #73



- 119) When written in the treble clef, a pitch is written a PERFECT 5th interval ABOVE the CONCERT PITCH. The key signature has this same relationship. When writing for the horn in its lowest range in bass clef, the pitch is written a PERFECT 4th interval BELOW the CONCERT PITCH.

Ex. #77

WRITTEN:

SOUNDS:

- 120) Reference points X and Y illustrate the CHANGE OF CLEF, both instances SOUNDING "F" below middle "C," but written a 4th below in bass clef, and a 5th above in treble clef. Historically, the horn used to be written without a key signature, but the established procedure in jazz, rock and commercial writing today is to state the key signature a 5th above the concert key.

- 121) TONE QUALITY RANGE:

Ex. #78

CONCERT:

MOST EFFECTIVE RANGE

PRACTICAL RANGE

- 122) CHARACTERISTICS: The French horn is a slow speaking instrument whose sound production is such that it seems "distant." The French horn is not as strong as the brass, but is louder than the woodwinds, and bridges these sections.
- 123) In conventional big band writing, the French horn is often used with the brass section, doubling the trumpet lead an octave lower, particularly when only one or two horns are available. The French horn is an excellent lead over the trombone section, and can be used in octave or unison with woodwinds.
- A section of four horns can be written in unison, two part (split 1st and 3rd horns, 2nd and 4th), three parts with doubled lead (or lead doubled an octave lower), or in four part. Experienced players are needed to make the four-part divisi come off in tune.
- 124) RESTRICTIONS AND CONSIDERATIONS: The lowest octave of the French horn is not used too often except for pedal effects, however, it blends well with low brass in this range. Starting at "F" below middle "C," it blends well with clarinets, and ascending, with flutes and trumpets.
- All types of articulation are possible and should be consistent with trumpets and trombones. The sforzando-piano(sfp) is extremely effective.
- 125) A "stopped" effect is indicated with + above the note. Although a mute is available, the "stopping" can be done by hand. The indication "0" is used to cancel the +.

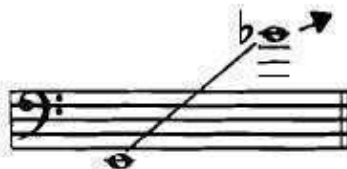




### THE TENOR TROMBONE

- 126) The tenor trombone is a non-transposing instrument written in bass (and in extreme high notes, tenor clef) clef. It has a **WRITTEN RANGE** of:

Ex. #79



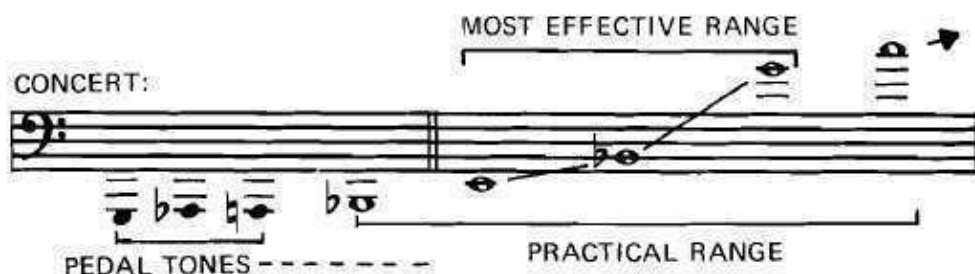
and a **SOUNDING RANGE** of:

Ex. #80



- 127) TONE QUALITY RANGE:

Ex. #81



- 128) **CHARACTERISTICS:** The trombone provides the body of the brass sound. Its round, blending qualities are effective with trumpets, as a section, and used as a SOLO or background. It also blends well with saxes, woodwinds and French horn. Cup and straight and solo tone mutes are available for trombones, however, the H.O.B. (hand over bell) indication is used in lieu of a hat in most instances.
- 129) **RESTRICTIONS AND CONSIDERATIONS:** The primary consideration when writing for trombone is to avoid the more awkward slide positions. This note:

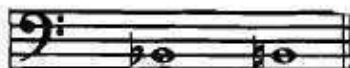
Ex. #82



is played in the 7th position.

The movement of:

Ex. #83



therefore requires the player

to change from 1st position to 7th and is extremely awkward. To enable you to relate to the various slide positions, Example 84 states the seven positions and available tones.

Ex. #84



- 130) Glisses are possible on trombone when moving from one note to the next, if these notes are at least two positions apart and in the same harmonic position above the fundamental. The first three pedal tones shown in Example 81 are not as practical as the Bb pedal. From low "E" to Bb, the quality is quite dense and does not have the flexibility possible in the higher portions of its range. Solo situations use the extreme top of the range, the top limit determined by the individual players.



### THE VALVE TROMBONE

- 131) The Bb tenor valve trombone is identical to the tenor trombone in range. It also is not a transposing instrument.
- 132) **CHARACTERISTICS:** The valve trombone has the great advantage of more technical facility than the slide trombone. Soloists such as Bob Brookmeyer prefer its sound and resources. In general, the valve trombone lends itself well to the jazz idiom.
- 133) **RESTRICTIONS AND CONSIDERATIONS:** The main considerations are a difference in tone quality from the slide trombone and intonation problems. When writing for a valve trombone in a section with slide trombones you will notice the different tone quality and as a result the overall blend of the section will often suffer. There are intonation difficulties which are again determined by the capabilities of the individual players.



### THE BASS TROMBONE

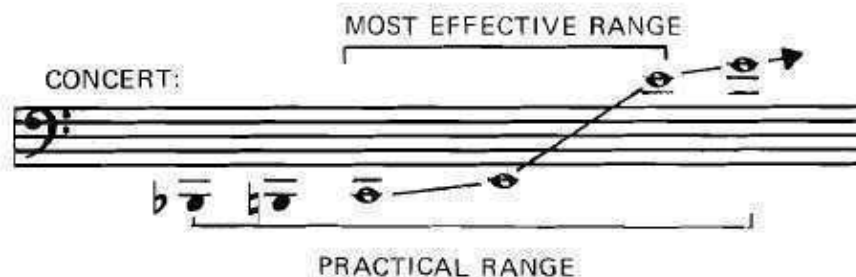
- 134) The bass trombone is a non-transposing instrument. Its WRITTEN and SOUNDING RANGES are:

Ex. #85



135) TONE QUALITY RANGE:

Ex. #86

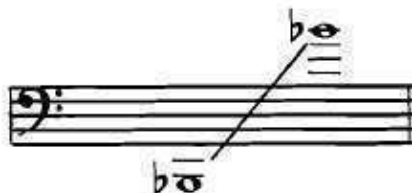


- 136) CHARACTERISTICS: The bass trombone has a warmer quality in its bottom octave than the tenor trombone. The obvious advantage of this extended bottom range is that it enables the bass trombone to function extremely well as the bottom voice of any low brass instrumentation. The bottom octave can now be negotiated with authority and intensity. The bass trombone is also effective as a solo instrument, playing solo fills, patterns and bass lines.
- 137) RESTRICTIONS AND CONSIDERATIONS: The only consideration to keep in mind is not to write the bass trombone too high. This normally will not be a problem as the span of the bottom voice rarely would put the bass trombone into a too high register. It is in unison writing for the trombones that you should either drop the bass trombone an octave or give him a rest.

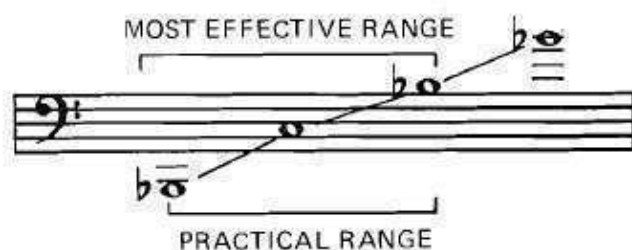
Bb TUBA (EUPHONIUM)

- 138) This is a non-transposing instrument with a WRITTEN and SOUNDING RANGE of:

Ex. #87

139) TONE QUALITY RANGE:

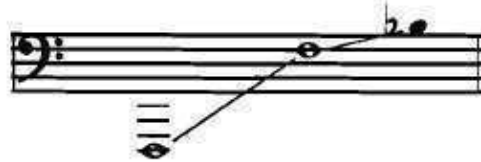
Ex. #88



BBb TUBA

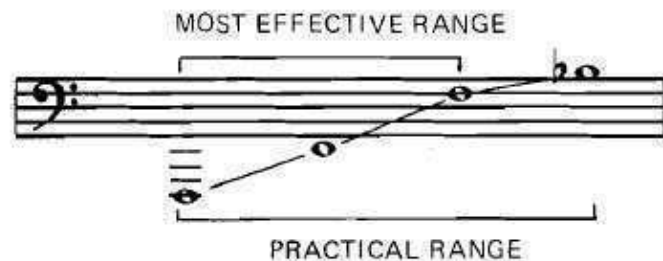
- 140) This is a non-transposing instrument with a WRITTEN and SOUNDING RANGE of:

Ex. #89



- 141) TONE QUALITY RANGE:

Ex. #90



- 142) CHARACTERISTICS: The tuba functions historically as the foundation of the brass section. It is also used with low brass (French horn, trombones, tuba) and can be employed in any number of MIXED SECTION SOLOS. It blends well with bassoon, bass trombone and bass. The tuba is effective in modern jazz orchestration, scoring "old time" 1920 or Dixieland styled music, or doubling the bass part. Modern contrary motion bass lines on tuba, against ensemble voicings are also very effective.
- 143) RESTRICTIONS AND CONSIDERATIONS: The lower portion of either tuba (the Bb or BBb tuba) is more effective. The higher portions of their ranges are practical. However, when we think tuba in its normal role, the lower portion of its range is the most effective. The tuba has a heavy quality and care must be taken that it does not overblow the remaining brass. The dynamic level should be marked one level lower to compensate.

THE RHYTHM SECTION

THE GUITAR

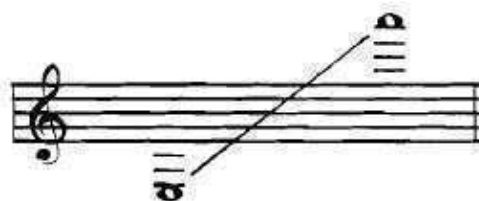
- 144) The guitar is a non-transposing instrument that has a SOUNDING RANGE of:

Ex. #91



It has a WRITTEN RANGE of:

Ex. #92



sounding one octave lower than written:

Ex. #93



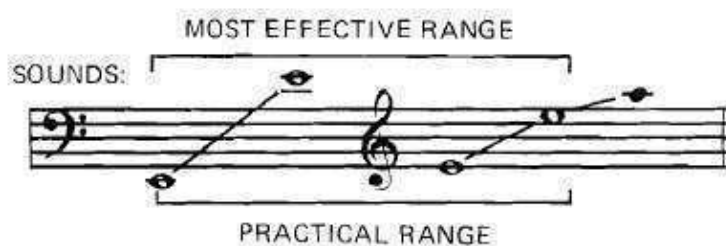
145) The guitar uses six strings tuned to the following pitches:

Ex. #94



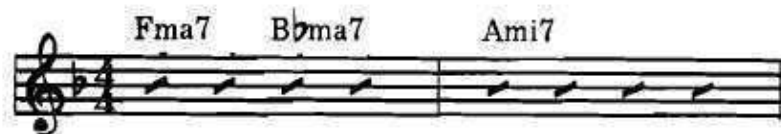
146) TONE QUALITY RANGE:

Ex. #95



- 147) **CHARACTERISTICS:** The guitar serves a double purpose, that of a rhythm "comping" instrument, and as a single note instrument for solos or soli lines with various instruments of the band.
- 148) When functioning as a jazz rhythm instrument, a free, unwritten approach to "comping" or background patterns is used. The arranger's obligation is to indicate chord symbols only, and the amount of beats each chord receives.

Ex. #96



The SPECIFIC VOICINGS and RHYTHMIC PATTERNS are left to the guitarist's ability and taste.

- 149) When functioning as a "rock" rhythm guitar, a stylistic (boogaloo, gospel) rhythmic pattern can be indicated at the beginning of the chart, after which regular beat indications are used (with the direction "simile"). The guitarist continues the basic pattern without the arranger writing it out throughout the chart.

Ex. #97



- 150) The top note of the voicing may be used to indicate a more specific voiceleading:

Ex. #98




- 151) Specific "TUTTI" rhythmic patterns should be stated.

Ex. #99





- 152) When functioning with other instruments, the guitar blends well in its bottom octave with bass clarinet, bass trombone, tuba and bass; middle octave with tenor sax, clarinets, French horn, and trombones. The top portion of its range blends with trumpets and alto sax. The great range of the guitar makes its orchestral possibilities very valuable . . . in addition, of course, to its value as a solo and rhythm instrument.
- 153) When writing a soli with horns, always indicate specific articulation markings identical to the horn articulations:  these solis, electrified guitar is the best to use.

### THE GUITARS

- 154) THE ELECTRIC GUITAR can be very flexible. A smooth mellow blending sound works best in straight-ahead jazz situations, while different rock styles might demand:
- a) Additional "highs" (add treble)
  - b) Country "twangy" effect
  - c) Funky (less amp, harder picking)
- 155) ACOUSTIC GUITAR (rhythm, Spanish, round hole, classical). All of these names cover the non-amplified guitar. They achieve the best "rhythm" accompaniment sound. They are inherent in Latin and bossa nova styles. Single note (called picking) is the identifying sound in "folk" styled music.
- 156) RESTRICTIONS AND CONSIDERATIONS: One of the prime considerations involving writing for guitar is the degree of complexity of written notes. Guitar voicings and capabilities are best handled by the individual guitarist himself, unless the arranger plays the guitar and can write from a personal knowledge of voicings. Otherwise, rhythmic, top note and stylistic indications will usually achieve a more practical, safer guitar part.



- 157) TYPICAL GUITAR RHYTHM PATTERNS FOR JAZZ STYLES IN DIFFERENT METERS: (These, of course, are basic patterns. Many variations are possible.)

### ODD METERS

Ex. #100



- 158) **JAZZ MODAL STYLES:** The important chordal indication is to define the particular **MODE** BEING USED WITH **VERY DEFINITIVE TRIADS PLUS THE TONIC** OF THE MODE (i.e., D/c / / / / C / / / /). See Table 19, Chapter 14, Definitive Triad column.



### THE PIANO

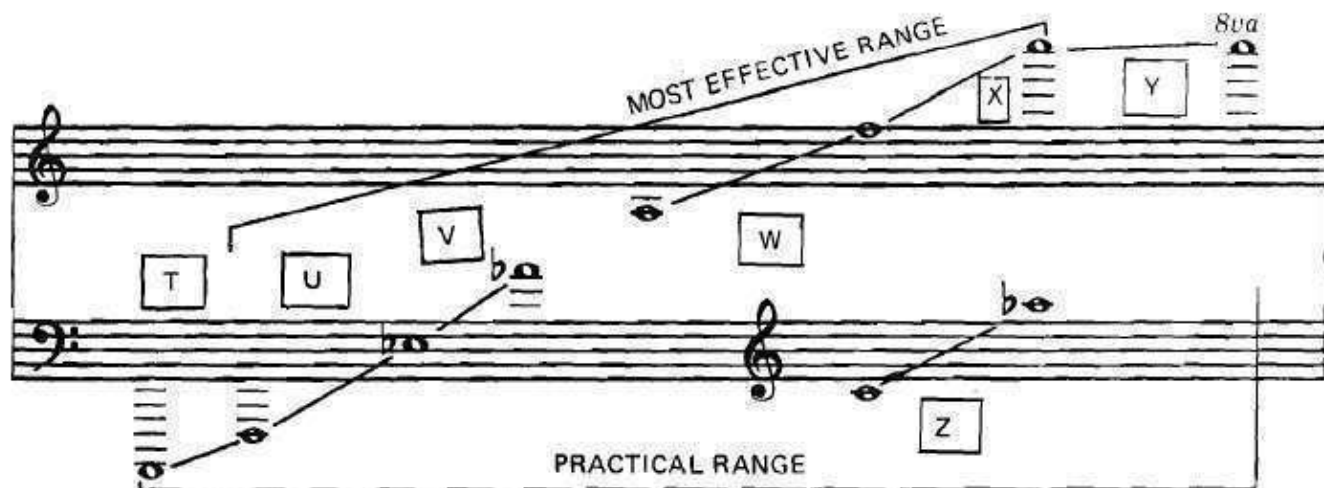
- 159) The *piano* is a non-transposing instrument with a **WRITTEN** and **SOUNDING RANGE** of:

Ex. #101



- 160) TONE QUALITY RANGE:

Ex. #102



161) **CHARACTERISTICS:** The piano functions in any combination of these effects:

- a) "COMPING" BACKGROUND — *Indication:* Chord symbols and descriptive words.
- b) ORCHESTRAL SOLOS — Bottom register reinforcement of pedal point effects, bass or trombones. *Indication:* Specific notes written in spans "T" and "U" of the TONE QUALITY RANGE.
- c) — Solos with guitar, vibes or woodwinds. *Indication:* Specific notes written in spans "V," "W," "X" or "Z" of the TONE QUALITY RANGE.
- c) SOLOS — Improvised — *Indication:* Chord symbols.
- Written — *Indication:* Specific melody with chord symbols or completely written passages in the practical range of the piano.

162) The bottom range of the piano (refer to Tone Quality Range, reference letter "T") is of little practical use except for percussive effects. Starting with the span of reference letter "U" through "V" is the normal LEFT HAND SPAN. The right hand normally uses the span from "W" through "X." The top extreme octave ("Y") is of little practical value. Span "Z" illustrates the normal span of the LEFT HAND when written to support a very high RIGHT HAND PASSAGE.

### PIANISTIC EFFECTS

163) a) GLISSES: Glisses can be executed up or down, using either white or black keys.

Ex. #103



b) SUSTAINED TONES (use of pedals): This is usually freely determined by the pianist. The arranger can specifically indicate the use of the pedal by writing brackets as shown in Example 104:

Ex. #104



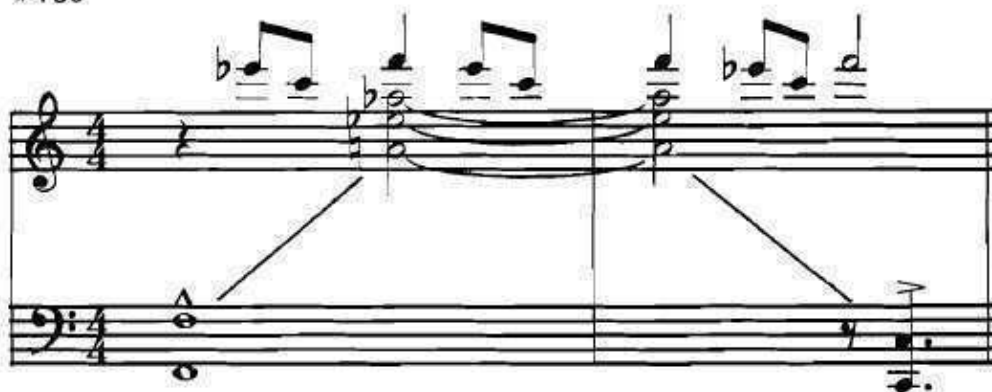
c) TREMOLO: Tremolos can be sustained for long periods of time, the piano being the only tonal instrument in a jazz or jazz/rock ensemble other than mallet instruments (vibes, etc.) that can achieve this effect without breathing considerations.

Ex. #105



d) CHANGING STAVES: When writing the left hand in treble clef, or right hand in bass clef, two approaches can be used.

Ex. #106



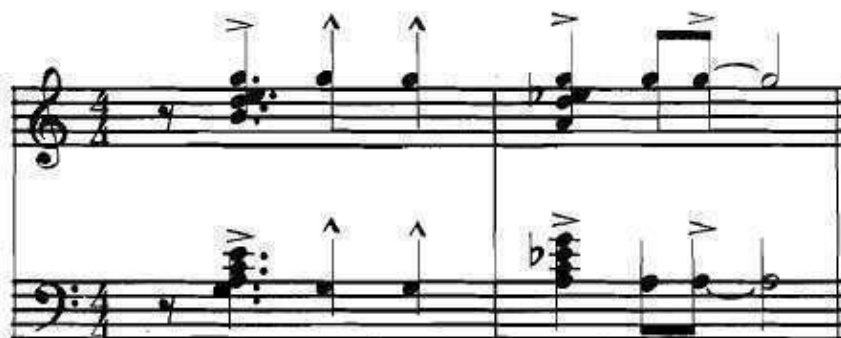
Ex. #107



e) PIANO NOTATION:

- 1) When writing chord voicings that rhythmically repeat the same notes without changing, they can be indicated in the following manner (see Example 108):

Ex. #108



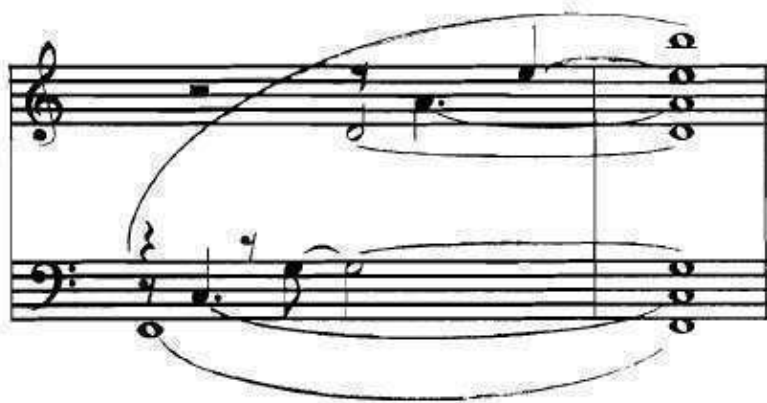
## 2) Repeating one beat patterns:

Ex. #109



## 3) Sustained arpeggios:

Ex. #110



## 4) Fingerings: Fingerings are almost always left to the discretion of the pianist.

- f) Most commercial, popular and some jazz-styled piano parts will indicate the string or electric bass part in the bass clef of the piano. This is not meant literally for the pianist to play. Rather, it is meant as an indication or guide for the pianist, of the bass part so that as he arbitrarily voices his chords, he can coordinate his bottom voice with the bass note.

**RESTRICTIONS AND CONSIDERATIONS:** Like writing for the guitar, the most practical approach for piano is the basic indication of chords, phrasings and stylistic descriptions. Often it is wise to tacit the piano or indicate "no fills" to insure that the "free interpretation" by the pianist does not get in the way of subtle and delicate orchestral voicings.

For the non-pianist arranger, it is best not to assume that the pianist can reach over a span of a major 9th or 10th.

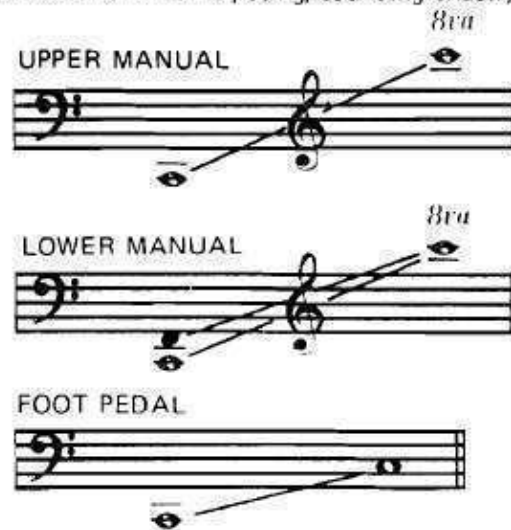
- 164) Odd meter and Modal approaches already stated for the guitar are also valid for the piano. Review Paragraphs 157 and 158.



### THE ORGAN

- 165) There are so many different types and makes of organs that they cannot be standardized as to range and registration. The instrument is non-transposing, sounding exactly where written. The normal safe range is:

Ex. #111



**CHARACTERISTICS:** The organ has gained much popularity in the jazz and rock idioms. This is partly due to its power, dynamic range and color flexibility. It is normally played by the pianist and considered a keyboard double.

- 166) **RESTRICTIONS AND CONSIDERATIONS:** The organ is usually used as a solo instrument; as a reinforcement for horns and strings; and as a comping background for solos. In an orchestral context, the foot pedals are not too frequently used, however, the pedals provide reinforcement for trombone and baritone sax pedal point melodic bass lines, and as a continuation of full ensemble chords played on the manuals.
- 167) The pedals can be used in lieu of a bass, but it is not wise to double with the bass.
- 168) Specific models of organs have accompanying booklets describing various stops and registrations. A further study can be made by obtaining these booklets.



### THE ELECTRIC PIANO AND NOVACHORD

- 169) The range of the electric piano is:

Ex. #112





The range of the novachord is:

Ex. #113



All the remarks concerning piano apply to both the electric piano and novachord, adjusted to the shorter keyboards.

- 170) The amplification possible with these instruments increases their ability to **BALANCE** orchestrally with the horns, but care must be taken **NOT** to over-balance.



### THE BASS

- 171) The bass is a non-transposing instrument whose **SOUNDING RANGE** is:

Ex. #114 and whose **WRITTEN RANGE** is: Ex. #115



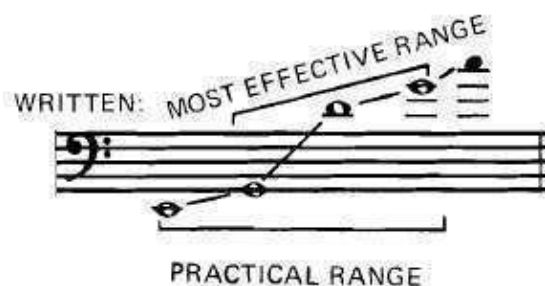
- 172) It is written an octave **ABOVE** its sounding pitch.

Ex. #116



- 173) TONE QUALITY RANGE:

Ex. #116



- 174) **CHARACTERISTICS:** The bass is probably one of the two most important individual chairs in the modern jazz or rock ensemble. The evolution of the bass has increased its responsibilities to include a **STRONG RHYTHMIC FEEL**, an ability to play **LINEAR MELODIC WALKING BASS LINES**, and the task of **DEFINING THE HARMONIC STRUCTURE OF THE ARRANGEMENT** in relation to the orchestration of the horns.

Use of the most effective range (as shown in Example 117) projects the strongest, fullest sound from the bass. The higher extremes of its range are better used in solo situations.

- 175) Many of today's jazz/rock compositions are literally constructed over a bass pattern which defines the character of the whole arrangement. The particular bass pattern used can motivate any number of basic effects: two beat, four beat, boogaloo, Latin or odd-time meters, thereby affecting the entire concept of an arrangement.
- 176) **RESTRICTIONS AND CONSIDERATIONS:** It is best to avoid the overuse of the low, open "E" string with acoustic bass.
- Including the basic chord symbol over the written bass line of a jazz or rock bass part will enable the talented bassist to see what you have in mind, and then improve on your basic part, adding his intuitive ideas. Experienced bass players prefer only chord symbols and a word description of the style. In these cases, the results are usually better than what the arranger can write.
- 177) Mixing portions of the bass part between chord symbols only and written lines (where specific inversions are needed to correspond with the horn voicings) is quite normal and practical.

### CONSTRUCTING BASS PARTS

- 178) Bass parts can be approached three ways:
- a) Commercial, popular and soft rock parts have little melodic importance, a simplified rhythm role, but are required to define simple chord structures in an uncomplicated fashion. The following examples illustrate various styles in which this approach to a bass part is used. Each case defines the harmonic settings. The numbers below each note relate to that note's function in the chord (i.e., 1 = the root, 3 = the 3rd of the chord).

Ex. #118

#### COMMERCIAL TWO BEAT



Ex. #119

#### BALLAD



Ex. #120

## COMMERCIAL SWING



Ex. #121

## COMMERCIAL BOSSANOVA, OR SOFT ROCK



- 179) b) Jazz lines are very melodic in character, utilizing a complete knowledge of all scales and their relationships with chords and key areas. The following example illustrates the use of horizontal scale lines, made more interesting by the techniques of CHANGING DIRECTION, A SKIP OR LEAP AND MOVING IN THE OPPOSITE DIRECTION OF THE SKIP, AND THE ADDITION OF DIATONIC AND CHROMATIC PASSING TONES.

Ex. #122



- 180) c) Rock and certain jazz styles will use a primary bass rhythmic pattern, usually two measures in length, in a repetitive fashion. The main elements here are melodic and rhythmic, with less emphasis on harmonic definition. This is especially typical of modal and blues compositions.

## Ex. #123

## BLUES BASS PATTERN



## Ex. #124

## LATIN JAZZ BASS PATTERN



- 181) Always remember the harmonic responsibility of the bass. We ASSUME this harmonic definition in the bass part, thereby allowing us the freedom, when voicing the horns, to OMIT THE BASIC CHORD FUNCTIONS ON OCCASION, TO ACHIEVE A MORE UNIQUE AND INTERESTING EFFECT. This is direct relationship with this book's concept of DENSITY and the SPAN OF ORCHESTRATION. The meaning of this statement will become more important to you as you study and develop these concepts in Section Four of this book.
- 182) ARCO BASS is another individual effect possible with acoustic bass. Ample time to pick up and put down the bow must be allowed. The indication to use the bow is the instruction: ARCO. PIZZ. indicates the resumption of plucking the bass.

THE DRUMS183) BASIC EQUIPMENT

- a) Right Hand Cymbal
- b) Left Hand Cymbal
- c) Small Tom Tom
- d) Snare Drum (snare on or off)
- e) Large Tom Tom
- f) Bass Drum
- Hi Hat
- Sticks
- Brushes
- Mallets

AUXILIARY EQUIPMENT

- Additional Cymbals
- Additional Tom Toms
- Additional Bass Drum
- Woodblock (W.B.)
- Cowbell (C.B.)

184) DRUM EFFECTS:

- a) Rim Shot (R.S.)
- b) On Rim (On Rim)
- c) Roll (On Snare or Tom)



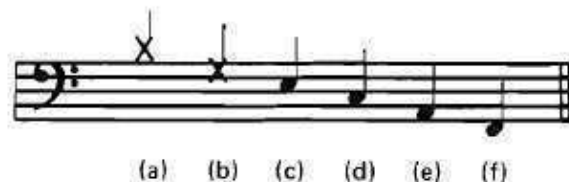
On Cymbal:



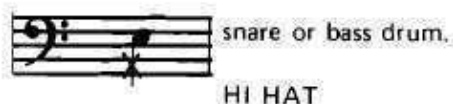
- 185) The following is a basic notation which will specify the basic equipment listed above:

Ex. #125

(Letters correspond to the Paragraph 183 letters.)



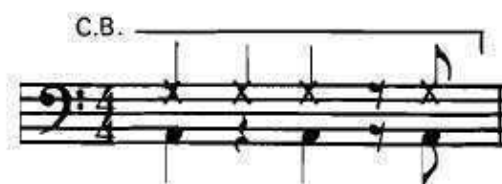
- 186) The use of the Hi Hat can be indicated and added to any of the other notations (a through f) by this method: Ex. #126



- 187) The above is a very specific notation to indicate all of the drummer's basic equipment. The auxiliary equipment consisting of additional cymbals, tom toms and bass drum can be left to the drummer's own discretion, as he is simply substituting an additional cymbal or tom where you have indicated the use of cymbal or tom.

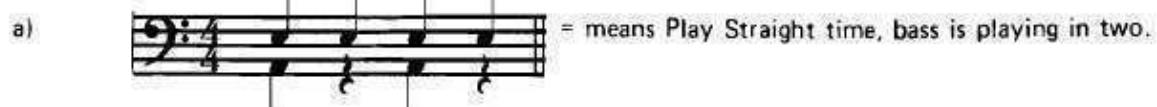
- 188) The woodblock or cowbell are indicated by abbreviating W.B. or C.B. These abbreviations can be used on isolated beats or on a series of them, indicated by the abbreviation and a bracket.

Ex. #127



- 189) In practical application the drum parts are simplified a great deal in comparison to the detailed notation of the entire drum set. The following are a series of accepted drum notations:

Ex. #128



## Ex. #129

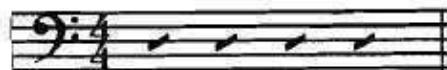
b)



= means Play Straight time, bass is playing in four.

## Ex. #130

c)

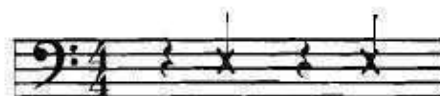


= means Play Straight time, in four.

- 190) All the above examples automatically imply the Hi Hat is also played on the second and fourth beats. Referring to the Hi Hat by name is only necessary if that is ALL you wish played.

## Ex. #131

(HI HAT ONLY)



- 191) **CHARACTERISTICS:** The drummer is the motor that runs the band, the keeper of the time (along with the bass). The drums add an excitement that can make a performance a musical success . . . or not. The drummer's responsibilities are, in their order of importance:

- Play time, meaning play time FOR THE BAND, integrating WITH the band, not for the drummer's own solo kicks.
- Support and set up rhythmic figures played by the ensemble, brass or various sections. One of the most important functions of the drummer is to add this support with authority. This cannot be done unless you provide him with the proper indications. This is done by cueing these rhythmic patterns above the staff on the "B" space of the bass clef. A word abbreviation of who is playing at the time is needed to give the drummer a dynamic and intensity level.

## Ex. #132

(BRASS)



- Individually spark and contribute to the performance behind a soloist or on fills, etc.
- Function as a soloist.



- 192) Solo fills are indicated in this manner:

Ex. #133



- 193) Specific rhythmic BREAKS are indicated in this manner:

Ex. #134



This is the area where the constant "play time" premise is broken. The specific pattern is written on the staff, and this is how the drummer knows that this is the specific pattern you want *and only this*.

- 194) Cymbal rolls are indicated in this manner, in either rubato or tempo situations:

Ex. #135



- 195) The large portion of a drum part can be repetition. The following are examples of different short cuts in notating this:

Ex. #136



## Ex. #137

(BASS IS PLAYING 2 BEAT)



## Ex. #138

(BOSSA NOVA PATTERN)



## Ex. #139



## 196) GENERAL TIPS:

- a) Coordinate the bass part rhythms with the bass drum line.
- b) Use word abbreviations to keep the drummer aware of who, in the band, is playing where. He will play differently according to who he is backing.
- c) Use dynamic markings as carefully as you do with horns.
- d) Indicate "sticks," "brushes," or "mallets" at the beginning of the chart. Allow a preparation time to make a switch from one to the other (sticks to brushes, etc.)
- e) Use word descriptions to communicate the style you wish played (i.e., *bossa nova*, *jazz waltz*, *hard four*, etc.)

## THE PERCUSSION FAMILY

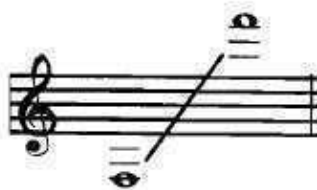
- 197) This first group of percussion instruments are those **TONAL INSTRUMENTS** played with mallets. These are usually performed by a percussionist *other than the drummer*. In many instances, two percussionists are available, dividing the assignments of the various instruments. When writing for either one or two percussionists, you should carefully work out instrument changes to allow time to move from one to the other.

### THE VIBRAPHONE

(Vibes, Vibraharp)

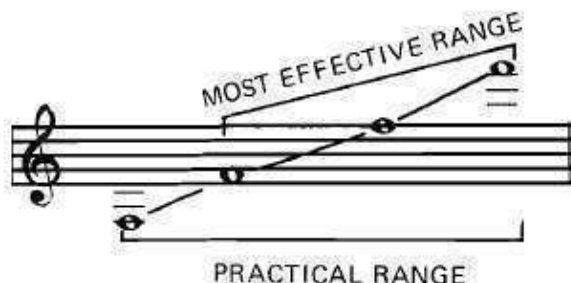
- 198) The vibraphone is a non-transposing instrument with a **WRITTEN** and **SOUNDING RANGE** of:

Ex. #140



- 199) TONE QUALITY RANGE:

Ex. #141



- 200) CHARACTERISTICS: The vibraphone is the most adaptable to jazz orchestration, functioning with the other instruments and as a soloist, written or improvised. A vibrato is produced by revolving discs at the top of graduating lengths of tubes placed vertically under metal bars. The speed of the revolutions can be varied, producing a "slow" to "fast" vibrato, or with the motor off (no vibrato). Different types of mallets can also be indicated, such as "soft" mallets, or "hard" mallets, depending on the desired effect. Three or four mallets can be used for chord work in uncomplicated passages. The vibes are equipped with a sustaining pedal.
- 201) RESTRICTIONS AND CONSIDERATIONS: The lowest octave is of questionable value orchestrally, lacking a full tone quality and requiring amplification. The remaining two octaves are very effective, blending well with woodwinds or doubling trumpet lead with the brass or ensemble passages.



### THE XYLOPHONE

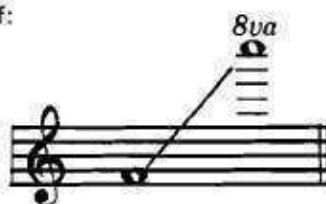
- 202) The xylophone, a non-transposing instrument, has a WRITTEN RANGE of

Ex. #142



and a SOUNDING RANGE of:

Ex. #143



- 203) Example 144 illustrates the OCTAVE RELATIONSHIP between the WRITTEN and SOUNDING RANGES.

Ex. #144



- 204) TONE QUALITY RANGE:

Ex. #145



PRACTICAL & EFFECTIVE RANGES

- 205) **CHARACTERISTICS:** The xylophone is used orchestrally. However its cold, penetrating, cutting sound prevents it from blending well in the jazz and rock idioms. The xylophone is not able to sustain a tone, and instead relies on a tremolo to effect held notes.

Ex. #146



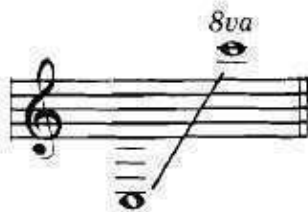
- 206) Fast scale passages, arpeggios and percussive attacks are characteristic. Glisses are also effective on xylophone.
- 207) **RESTRICTIONS AND CONSIDERATIONS:** The bottom portion of the xylophone has less of a piercing quality. If you orchestrate using the top span of the instrument, you should be aware of its isolated effect. This effect can be tempered by instructions to use soft mallets, rather than hard mallets. Three and four mallets can be used on uncomplicated chord passages.



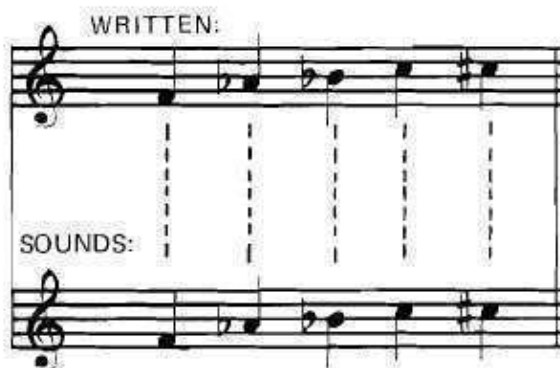
### THE MARIMBA

- 208) The marimba is a non-transposing instrument with a **WRITTEN** and **SOUNDING RANGE** of:

Ex. #147

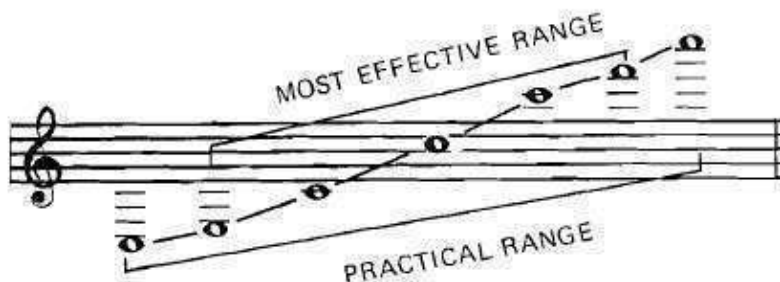


Ex. #148



- 209) **TONE QUALITY RANGE:**

Ex. #149



- 210) **CHARACTERISTICS:** The marimba, of course, is a typical Latin American sound. It is used orchestrally. Its woody rich quality is of more orchestral value than the sound of the xylophone. The bottom octave and a half is particularly unique and individual. This quality, added to its percussive attacks, suggests many interesting applications.
- 211) Its only means of sustaining a tone or chord is the tremolo. Three and four mallets can be used for chords and also can be sustained using the tremolo. This is the instrument's obvious trademark, especially in Latin music. Its value orchestrally, **OTHER THAN THE TREMOLO CHORDS**, suggests more jazz and jazz/rock possibilities.

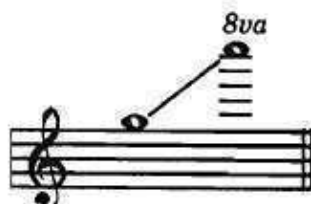


### ORCHESTRA BELLS

(Glockenspiel)

- 212) Orchestra bells are a non-transposing instrument sounding two octaves higher than written. Its **SOUNDING RANGE IS:**

Ex. #150



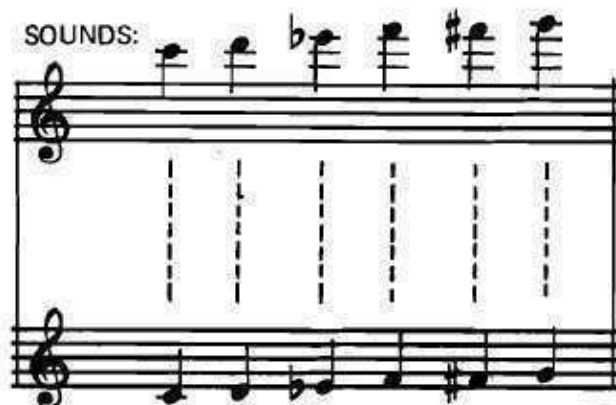
and its **WRITTEN RANGE** is:

Ex. #151



- 213) Example 152 illustrates the two octave relationship between the **WRITTEN** and **SOUNDING** RANGES.

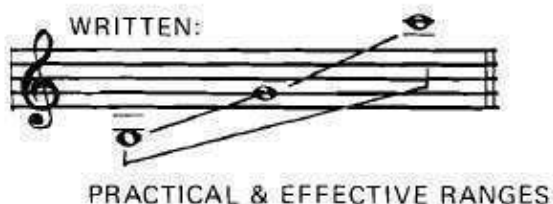
Ex. #152



**WRITTEN:**

214) TONE QUALITY RANGE:

Ex. #153



215) CHARACTERISTICS: Orchestra bells are very effective orchestrally. Their clear, bright sound in their very high register adds a dimension to brass ensemble passages, as well as in combination with vibes, piano and woodwinds.

216) RESTRICTIONS AND CONSIDERATIONS: The entire range of the instrument is quite practical. The upper portion has a tendency to ring and should be carefully considered when written with instruments with definitive articulations.

THE TIMPANI

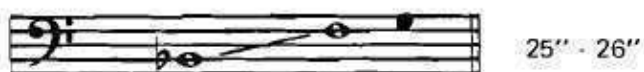
217) The timpani are usually used in groups of three or four. Each produces one pitch at a time. They are a non-transposing instrument written in bass clef and have the following ranges:

218) RANGES OF THE FOUR SIZES OF TIMPANI:

Ex. #154



Ex. #155



Ex. #156



Ex. #157





They have a combined range of:

Ex. #158



- 219) **CHARACTERISTICS:** The timpani add an important dramatic quality. Their use as a reinforcement of cymbal and tom tom rolls, pedal tones, brass attacks or as a solo instrument add a great deal to your orchestral possibilities. Dynamic flexibility is an integral part of their effectiveness as these examples show:

Ex. #159



Ex. #160



Ex. #161



- 220) **RESTRICTIONS AND CONSIDERATIONS:** The main restriction concerns available tones and frequency of change. As the number of timpani available is questionable unless writing for a specific instrumentation, you cannot assume all four drums can be written for. If only two are available, they will usually be the 25" and 28" drums. It is important in most cases to harmonically analyze the passage to be reinforced, choosing the tonic or dominant of the key area and basing the timpani on these.
- 221) Ample time must be allowed for RE-TUNING each drum for new tones. The over-use of timpani lessens their overall impact and should be restricted to climactic points and situations that can only be performed on timpani.
- 222) Such effects as striking a pitch and glissing up can be indicated by:

Ex. #162



**NON-TONAL PERCUSSIVE INSTRUMENTS****Group A – Rhythmic Instruments with  
the Rhythm Section**

- 223) **CONGA DRUMS** – A large and small drum producing deep tones, and played in a seated position. By striking the heads in the center or edge, different tones are produced. They are usually written with a simple guide part, the player intuitively adding to the part. They can be notated:

Ex. #163



- 224) **BONGO DRUMS** – Smaller drums than conga drums. A large and small drum held together with a brace and struck with the hands. They are capable of incredible speeds with a great deal of definition. They are higher pitched than the conga drums and can be notated in this manner showing the alternation between the two drums.

Ex. #164



- 225) **TIMBALES** – These are larger than bongos and are played with sticks. A basic Latin instrument.
- 226) **MARACAS** – Maracas are two gourds, filled with buckshot or dried seeds. They are usually played in a constant eighth note pattern with varying accents. They can be notated:

Ex. #165



- 227) **CLAVES** – Two short wooden sticks. The first is held and struck with the other. More typical of older Latin musical styles. The basic clave pattern and notation is:

Ex. #166



## Ex. #167



- 228) **SHAKER (TUBO)** – Cylindrical tube filled with sand. The rhythmic pattern is produced by moving the tube, shifting the sand. Typical of bossa nova music. A quiet, constant sound. It can be notated:

## Ex. #168



- 229) **GUIRO** – A serrated gourd that is scraped with a wire or stick. Its more penetrating sound is typical of Latin music.
- 230) **TAMBOURINE** – A round frame, covered on one side with a stretched membrane. Small metal disks are attached to the frame producing a ringing effect. Very typical of rock rhythm sections. Many rhythmic patterns are possible.

## Group B – Color Percussion Instruments

- 231) This group of instruments do not "play with" the rhythm section, but rather are considered *added* orchestral colors and effects. All of these are not available in every situation, and the arranger must be realistic in his choice.

- 232) Field Drum  
Piccolo Snare Drum  
Snare Drum  
Finger Cymbals  
Bell Plate  
Gong  
Sleigh Bells  
Piatti (two hand cymbals)  
Ratchet  
Temple Blocks  
Triangle  
Wind Chimes



## SECTION I — THE TECHNICAL FOUNDATION

### Chapter 2: Musical Terms, Notation and Harmonic Terminology

#### BASICS REFRESHER

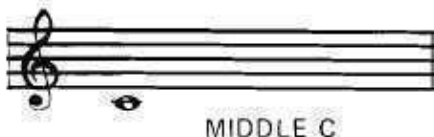
- 1) This chapter contains a reference breakdown of the following basic areas:
 

Clefs Key Signatures Signs Commonly Used In Arranging Tetrachords Double Sharps and Flats Scales Intervals	Chord Construction Chord Terminology Chord Families Polychord Notation Chord Progressions The Major Key Areas The Minor Key Areas
--	---
- 2) I would recommend that you review this material. IT IS ALL VERY BASIC AND USED CONSTANTLY. DO NOT ASSUME YOU ALREADY KNOW THESE AREAS. A familiarity with this chapter is very important to the most complete possible understanding of the remainder of the book.

#### CLEFS

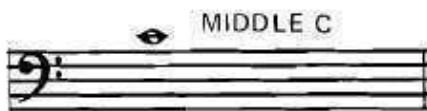
- 3) The "G" clef, or treble clef:

Ex. #169



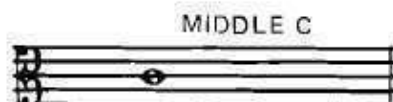
- 4) The "F" clef, or bass clef:

Ex. #170



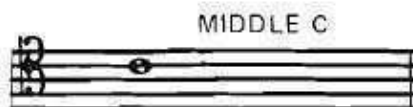
- 5) The alto clef:

Ex. #171



- 6) The tenor clef:

Ex. #172



- 7) The following example shows the location of all possible key signatures as written in the treble clef:

Ex. #173



- 8) The following example shows the locations of all possible key signatures as written in the BASS CLEF:

Ex. #174



- 9) The following example shows the locations of all possible key signatures as written in the ALTO CLEF:

Ex. #175



- 10) The following example shows the locations of all possible key signatures as written in the TENOR CLEF:

Ex. #176



#### SIGNS COMMONLY USED IN ARRANGING

- 11) Crescendo (Example 177) and Decrescendo (Example 178):

Ex. #177



Ex. #178



- 12) Crescendo or Decrescendo extended over a distance of two measures or more should be written:

Ex. #179

*cre-----scen-----do*

Ex. #180

*de-----cre-----scen-----do*

These can also be written:

Ex. #181

*crescendo -----*

Ex. #182

*decrescendo -----*

- 13) Many times it is expedient to indicate a part to be played an octave higher or lower than it is written, or two octaves higher or lower than it is written. This would specifically relate to high flute and piccolo passages, and low bass and tuba parts.
- 14) The indication to play a part one octave higher than written is:

*8va-----*

- 15) The indication to play a part two octaves higher than written is:


*15va----- (not 16va)*


- 16) The indication to play a part one octave lower than written is:




*8vb-----*

- 17) The indication to play a part two octaves lower than written is:

*15vb-----*

- 18) When using any of these indications, be sure to end the length of the phrase (indicated by the dotted line) with a short vertical line in the direction of the staff.
- 19) D.C. means Da Capo or "from the head." When this is used, it means that at that point the player is to return to the beginning of the whole piece and repeat the whole section.
- 20) D.S. means "from the sign" (Dal Segno). This indication tells the player to return to the point where the sign  is placed and repeat from that point.

- 21) The sign for the CODA is indicated 

- 22) It is quite common to use D.S. al  meaning go back to the sign  and repeat until the coda sign  is reached. At that point, the player skips to the coda and to the end (*fine*).

- 23) First and second endings can, of course, be of any length and varying lengths. The first ending (*prima volta*, meaning the first time) and the second ending (*seconda volta*, meaning the second time) are indicated as shown in example

Ex. #183



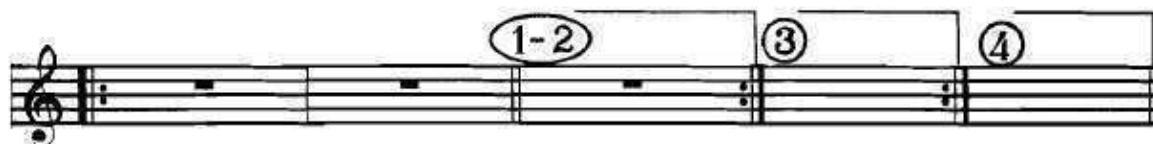
- 24) It is possible to have a different first, second, third, fourth, etc. ending; or relative combinations.

Ex. #184





Ex. #185



### TETRACHORDS

- 25) A TETRACHORD is made up of four tones, subdividing an interval of a perfect 4th. The tetrachord is the "building block" from which scales are formed. By combining two tetrachords, each containing three or four notes, a complete scale is formed.

Ex. #186

### TETRACHORD



### DOUBLE SHARPS AND FLATS

- 26) A double sharp is indicated:

Ex. #187



The black note heads in Examples 187 through 189 refer to the actual or enharmonic pitch of the double sharp or flat.

- 27) The cancellation of one sharp from the double sharp is indicated:

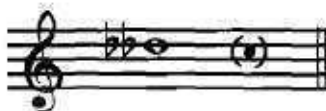
Ex. #187a



- 28) A double flat is indicated:

Ex. #188

CORRECT



- 29) The cancellation of one flat from the double flat is indicated:

Ex. #189



### SCALES

- 30) Scales are a basic foundation for any arranger. The meaning of the scales and their various uses is the basis for building chords, intervals and the relationship of chords in chord progressions, transposition, memorization, passing chords, reharmonization, constructing melodic fills, lead-ins, composing introductions, interludes, turnarounds and endings as well as background figures against a melody or solo.
- 31) The following examples will define the most important scales used in jazz, rock, popular and commercial music. If an in-depth study of the scales is in order, the reader can learn or review the following scales and their meanings and implications in either Lessons 1 through 5 of the Dick Grove Improvisation Course or in Volume I of my Encyclopedia of Basic Harmony and Theory as Applied to Improvisation.
- 32) The MAJOR SCALE:

Ex. #190



## 33) The MINOR SCALES:

The NATURAL (Normal) MINOR SCALE:

Ex. #191



## 34) The HARMONIC MINOR SCALE:

Ex. #192



## 35) The MELODIC MINOR SCALE:

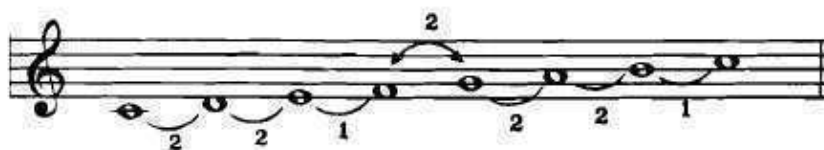
Ex. #193



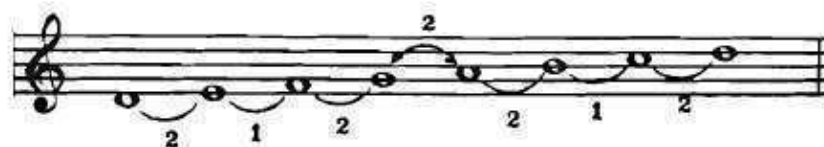
## 36) The MODAL SCALES:

Ex. #194

I • Ionian:



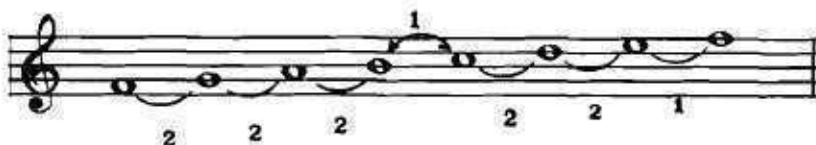
II • Dorian:



III - Phrygian:



IV - Lydian:



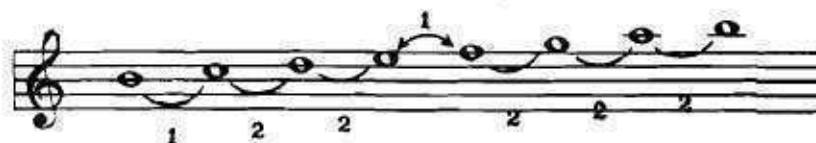
V - Mixolydian:



VI - Aeolian:



VII - Locrian or Hypophrygian:



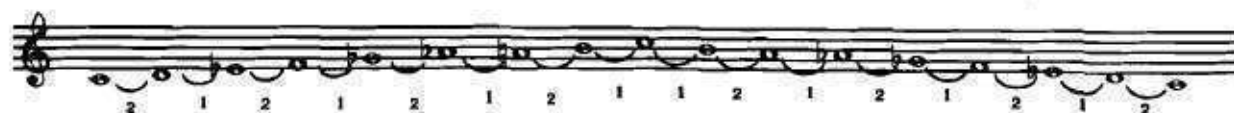
37) The WHOLE TONE SCALE:

Ex. #195



38) The DIMINISHED 8 NOTE SCALE:

Ex. #196



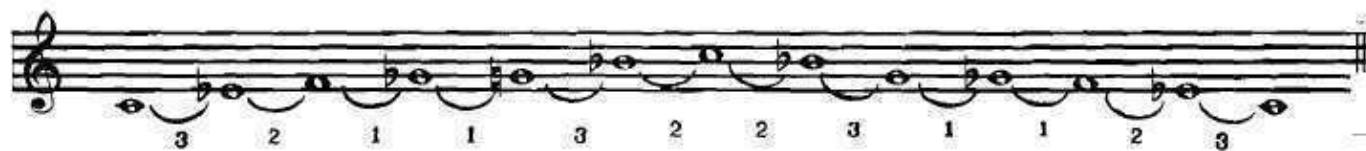
39) The DOMINANT 8 NOTE SCALE:

Ex. #197



40) The BLUES SCALE:

Ex. #198



41) The CHROMATIC SCALE:

Ex. #199

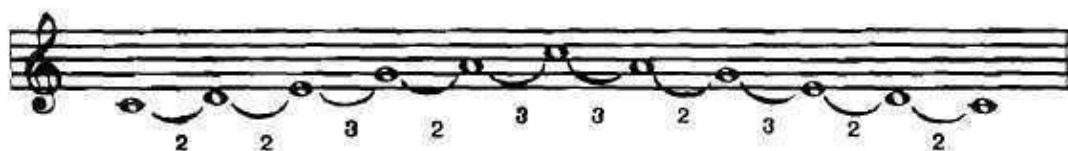


Ex. #200



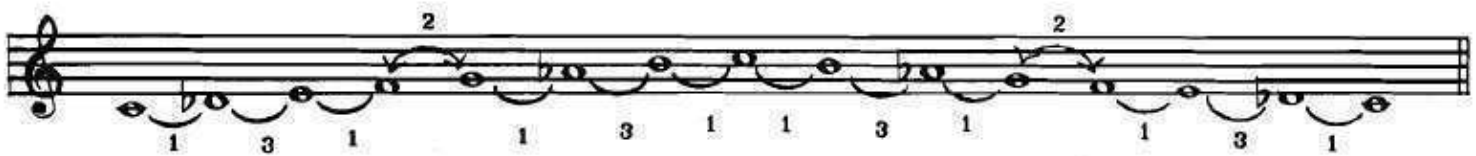
42) The PENTATONIC SCALE:

Ex. #201



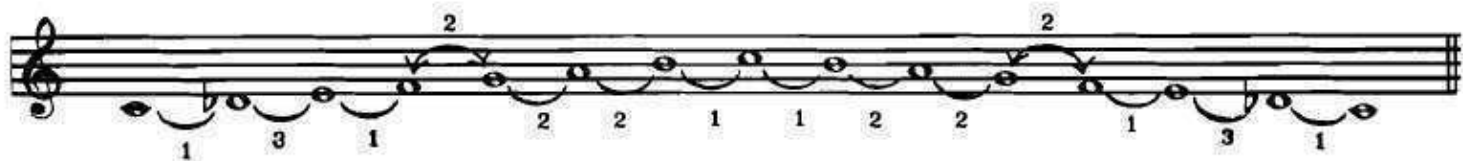
## 43) The ARABIC SCALE:

Ex. #202



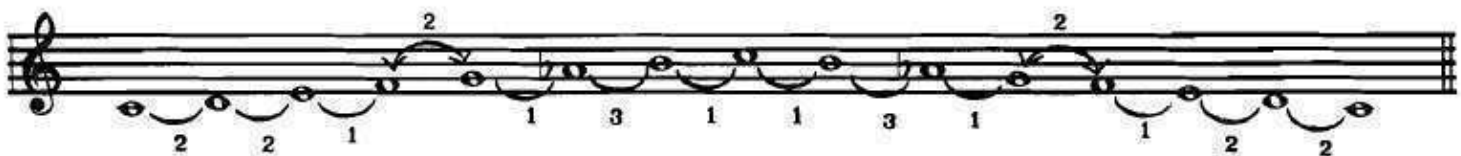
## 44) Various hybrid scales are possible by alterations of the major scale: lowering the 2nd degree:

Ex. #203



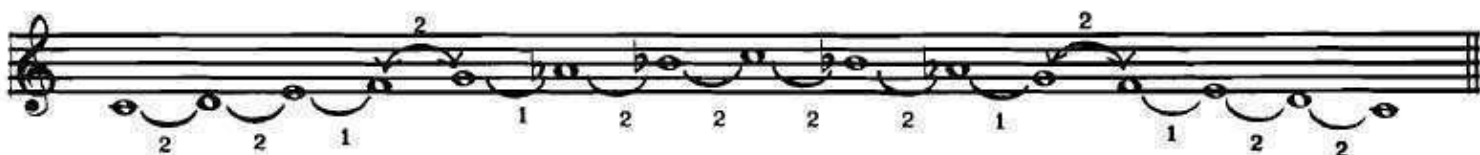
a) Lowering the 6th degree:

Ex. #204



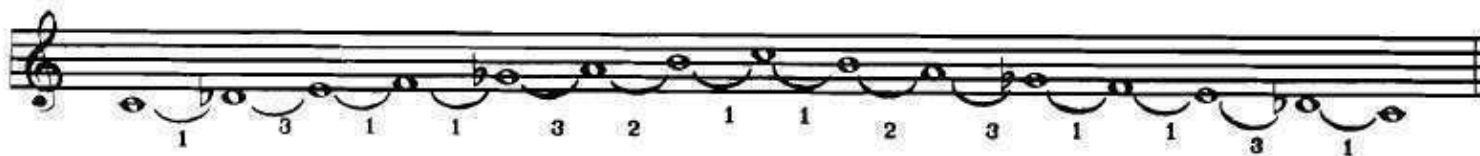
b) Lowering the 6th and 7th degrees:

Ex. #205



- c) Lowering the 2nd and 5th degrees:

Ex. #206



- 45) These altered scales are more applicable from a compositional standpoint. However, if you are arranging a composition based on one of these altered scales, an understanding of the scale is, of course, critical in determining melodic lines and diatonic chords.

### INTERVALS

- 46) The musical unit of measurement is the INTERVAL. In the same way that we have inches, feet and yards, etc. to determine the exact distance from one point to another, we have various musical terms to define the exact distance from one note to another.
- 47) The basis and "yardstick" needed to determine these distances is our major scale. A complete mastery and spontaneous awareness of all major scales is necessary to develop a facility with intervals.
- 48) The DIATONIC INTERVALS are based on the distance from the tonic of the major scale to another tone of the major scale:

Ex. #207



- 49) The next area of classification involves CHROMATIC INTERVALS. All of the previous intervals, the PERFECT and MAJOR, pertain to the diatonic notes of the major scale. Now we shall discuss the NON-DIATONIC TONES and their ENHARMONIC MEANINGS.

Ex. #208





- 50) Example 208 illustrates the possible chromatic tones needing classification. An explanation of these classifications follows:

- a) Any MAJOR or PERFECT interval, when expanded (raised) by a half-step, becomes an AUGMENTED interval.

Ex. #209



- b) Any MAJOR interval, when contracted (lowered) by a half-step, becomes a MINOR INTERVAL.

Ex. #210



- c) Any PERFECT interval, when contracted (lowered) by a half-step, becomes a DIMINISHED INTERVAL.

Ex. #211



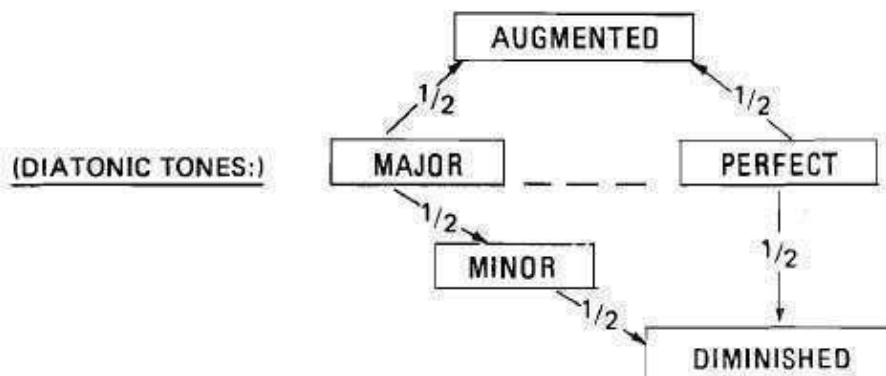
- d) Any MAJOR interval, when contracted (lowered) by a *whole step*, becomes a DIMINISHED INTERVAL.

Ex. #212



- 51) To help organize in your mind, and have an overall conception of the definitions on Page 65 the following chart should help.

Ex. #213



- 52) When determining an interval, these facts should be clear:
- If the UPPER NOTE of the interval is DIATONIC to the scale of the LOWER NOTE, the interval is MAJOR or PERFECT.
  - If the UPPER NOTE is CHROMATIC to the scale of the lower note extreme care must be taken to determine whether the note has been RAISED or LOWERED. Also the enharmonics of the altered note are very important. Recognizing the correct enharmonic enables you to classify the right scale degree.

### CHORD CONSTRUCTION

- 53) The correct construction of all chord forms is a prerequisite to good arranging. The development of arranging, as a creative expression, may be severely hindered by a lackadaisical or ill-informed attitude about the importance of knowing these chord forms in all keys, inversions AND WHAT THEY SOUND LIKE.
- 54) Stupid mistakes in chord spelling or basic harmony have ruined many a well-conceived chart. The beginning arranger seldom realizes that silly mistakes in chord spelling are at fault. Instead he loses his overall confidence, and starts doubting all his strong points. The final result, at best, is a setback of months, sometimes years in his ultimate development.
- 55) From a professional standpoint, there is literally NO EXCUSE FOR THIS TYPE OF ERROR. Chord spelling is the equivalent to knowing how to spell words or the multiplication tables. It is an EXACT SCIENCE in the sense that it is either right or wrong. And "I don't know" will never suffice.
- 56) In considering the fact that an arranger will be dealing with these same chord forms a million times, it goes without saying that having the correct approach and understanding of the value inherent in a complete knowledge of the chord forms is of PRIME IMPORTANCE.

- 57) The following pages will define all the practical 86 different chord forms, how they are altered and how they function. Once again I must add that a more complete study of the chord, are again available in my improvisation course, Lessons 7 through 15, and in Volumes I and II of my Encyclopedia of Basic Harmony and Theory.
- 58) The following examples are grouped together in CHORD FAMILIES. A CHORD FAMILY CONSISTS OF THOSE CHORDS HAVING A SIMILAR BASIS, THAT FUNCTION THE SAME WAY WITHIN A DIATONIC KEY AREA. It is recommended that you learn these chords within each CHORD FAMILY as a RELATED GROUP OF CHORDS, thinking of them as INTERCHANGEABLE within each specific CHORD FAMILY.
- 59) THE MAJOR CHORD FAMILY, functioning as a I chord in a KEY AREA:

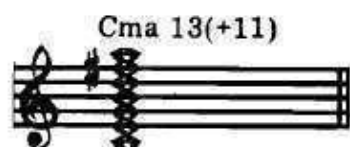
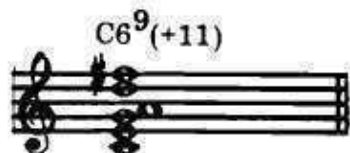
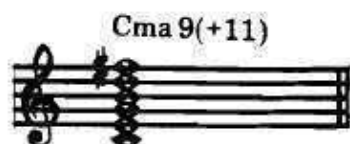
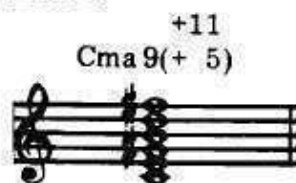
TABLE I

## I - MAJOR CHORD FAMILY

C	ALTERED:	C(b5)
C6		C6(b5)
Cma 7, Cmaj. 7, C7, C Δ	ALTERED:	Cma 7(b5)    Cma 7(+5)    Cma 7(b5) <sup>+5</sup>
Cma 9, Cmaj. 9	ALTERED:	Cma 9(b5)    Cma 9(+5)    Cma 9(b5) <sup>+5</sup>
C6 <sup>9</sup> , C6(9),	ALTERED:	C6 <sup>9</sup> (b5)
Cma 7(6 <sup>9</sup> )	ALTERED:	Cma 7(6 <sup>9</sup> , b5)

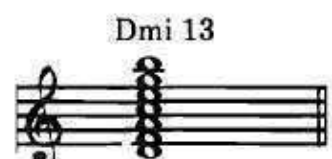
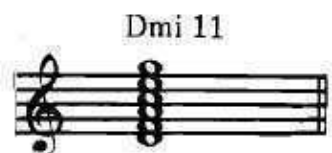
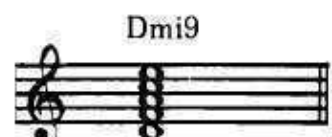
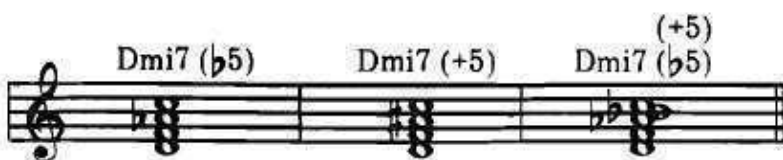
(Cont. on next page)

(Table 1 cont.)

**ALTERED:**

- 60) The minor 7th CHORD FAMILY, functioning as a II chord in a major key when used in an unaltered, diatonic form (see left hand column).

The minor 7th (b5) CHORD FAMILY, functioning as a II chord in minor key areas when altered by use of the b5 or #5 or both (see right side of Table II under heading of Altered).

**TABLE 2****II Minor 7 Chord Family****Altered**

- 61) The Dominant 7th CHORD FAMILIES, functioning as a V7 chord in major (when not altered), and as a V7 in a minor key area (when altered):

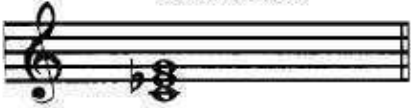

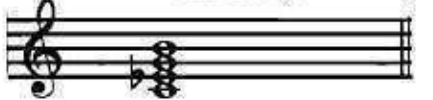

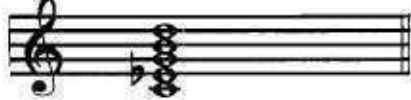


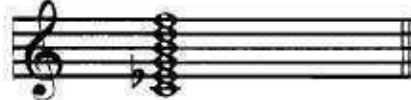
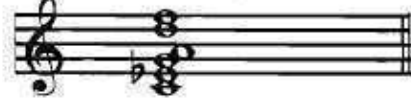
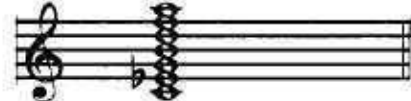
TABLE 3

V Dominant Chord Family	Altered
G7	G+7, G aug.7    G7 (b5)    G+7 (b5)
G9	G7 (b9)    G7 (+9)    G7 (b9) (+9)    G+7 (b9)    G7 (b5) (b9)    G9 (b5) (+9)
G11	G7 (b9) (b5)    G7 (+9) (b5)    G7 (b9) (+9) (b5)
G13	G11 (b9)    G11 (+9)    G11 (b9) (+9)
G13 (+11)	G9 (+11)    G+9 (+11)    G7 (b9) (+11)    G7 (+9) (+11)    G7 (b9) (+11) (+9)
G9 (+11)	G13 (b9)    G13 (+11)    G13 (b9) (+11)    G13 (+11) (b13)    G7 (b9) (+11) (b13)    G7 (+9) (+11) (b13)    G7 (b9) (+11) (+9) (b13)

\*Black noteheads are omitted.

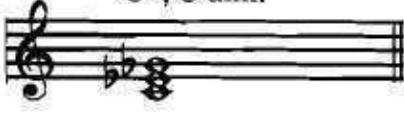
- 62) The MINOR CHORD FAMILY, functioning as the I chord in a minor key area. The DIMINISHED CHORD FAMILY, functioning as a VII<sup>o</sup>7 in minor key areas and as arbitrary passing chords:

TABLE 4


I Minor Chord Family	Altered
<p>Cmi, Cmin.</p> 	<p>Cmi(+5)</p> 
<p>Cmi ma7, Cmin maj7</p> 	<p>Cmi ma7(+5)</p> 
<p>Cmi ma9</p> 	<p>Cmi ma9(b5) Cmi ma9(+5) C mi ma9(+5)</p> 
<p>Cmi6<sup>9</sup>, Cmi6(9), Cmi 6/9</p> 	
<p>Cmi ma 11</p> 	
<p>C mi 11(add 6 )</p> 	
<p>Cmi ma 13</p> 	

**Diminished Chord Family**

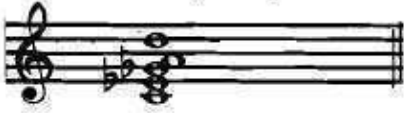
$C^{\circ}$ , C dim.




$C^{\circ 7}$ , C dim.7



$C^{\circ 7}(\text{addD})$



[ Possible added tones ]



- 63) The previous TABLES of the various CHORD FAMILIES have the following characteristics and implications:
- 64) All chord forms in the left column represent stationary chord forms. The "altered" possibilities of those standard forms are stated to the right of the standard forms. You should associate these chords in their family, or functioning relationship.

### TERMINOLOGY

- 65) When more than one version of a chord symbol is stated, it means that any of the versions are acceptable. The FIRST versions given, however, are the most accepted and are a clearer statement of the chord.
- It should be stressed that you should NOT indicate minor with only a small "m" (i.e., Cm7). It is too easy to confuse lower-case letters with upper-case letters.
  - By the same token, it is best NOT to indicate major with only an upper-case "M" (i.e., CM7) as this, too, can be confusing.
  - The symbol for major 7th, when indicated 7, or  $\Delta$  should always be defined at the beginning of the score.
  - Minor 7th (b5) chords are sometimes referred to a "half diminished 7th chords," with the symbol  $\circ$ . It is safer to write out Minor 7th (b5).
  - It is best to always enclose altered functions of a chord in parentheses. This clearly separates the altered functions from the chord symbol.
  - Suspensions are indicated in one of two ways: C sus4 for example defines a C Major triad, using a 4th (F) IN PLACE OF THE THIRD (E). C7 sus4 again defines C, F, G and Bb; the F used IN PLACE OF THE THIRD, (E). Another way of indicating a Dom 7, sus4 chord is to write Gmi7/ $\text{C}$ , which is the equivalent of a Dom 9th with a suspended 4th. Another variation of the Gmi7/ $\text{C}$  would be a Gmi7(b5)/c; which is the equivalent of a Dom 7th (b9) with a suspended 4th.



### CHORD FAMILIES

- 66) Any of the chord forms (left column) in Tables 1 through 4 FUNCTION the same way in a tonality. For this reason, they are interchangeable and serve as possible substitution chords to each other.
- a) This is a valuable source of chords to re-style the harmony of any composition you are arranging. The more familiar you are with these tables and the interchangeability of the chords, the more facility you will have harmonically. **MEMORIZE THE TABLES!**
  - b) The "altered" versions of the standard chord forms (in the left column) can be considered substitutions and variations of the chord form stated in the left column.
  - c) An asterisk indicates that the 3rd of the chord should be omitted in voicings and actual usage. (See Table 3, 4th and 6th staves.)

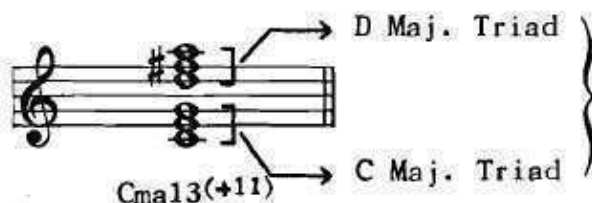
### POLYCHORD NOTATION

- 67) A more stylized approach to notate the larger chord forms is to superimpose a second chord over a basic chord. The term POLYCHORD means TWO CHORDS, and in this specific context, TWO CHORDS PLAYED SIMULTANEOUSLY.
- 68) This entire approach is based on PLURALITY. This STACKING OF TRIADS then is simply another way of detailing LARGER CHORD FUNCTIONS IN TRIADIC TERMS.
- 69) The prevalent mode of notation is to:
- a) Write the Basic Triad first, i.e.  $\frac{C}{C}$
  - b) Place a line above the basic triad, i.e.  $\frac{C}{C}$
  - c) Write the triad designating the tension notes to be played WITH the basic triad ... above the line, i.e.  $\frac{D}{C}$
- 70) Examples 214, 215 and 216 illustrate the two methods of stating the same relationship:

Ex. #214



Ex. #215



Ex. #216

$$\left. \begin{array}{l} \text{D Maj. Triad} \\ \text{C Maj. Triad} \end{array} \right\} = \frac{D}{C} \text{ Cma13(+11)}$$

- 71) The immediate problem is to understand and relate the POLYCHORD NOTATION to the conventional chord symbol notation which has defined all our possibilities.
- 72) POLYCHORD NOTATION can encompass altered chords as well as standard chord forms. (See Tables 5 and 6.)

TABLE 5

## KEY OF C MAJOR

I maj. chord family	I maj. alt. chord family	I.min. 7 chord family
Cma9 $-\frac{G}{C}$	Cma7(+5) $-\frac{E}{C+}$	Dmi9 $-\frac{Ami}{Dmi}$
Cma9(+11) $-\frac{Bmi}{C}$	Cma9(b5) $-\frac{Bmi}{C(b5)}$	Dmi11 $-\frac{C}{Dmi}$
Cma13(+11) $-\frac{D}{C}$	C6 <sup>9</sup> (b5) $-\frac{D}{C(b5)}$	Dmi13 $-\frac{Emi}{Dmi}$
		Dmi13 $-\frac{G}{Dmi}$
V7 chord family	Dim. 7th, functioning as a I <sup>o7</sup> :	Dim. 7th, functioning as a VII <sup>o7</sup> :
G9 $-\frac{Dmi}{G7}$	C <sup>o7</sup> add A <sup>b</sup> $-\frac{A^b}{C^{o7}}$	B <sup>o7</sup> add G $-\frac{G}{B^{o7}}$
G11 $-\frac{F}{G7}$	C <sup>o7</sup> add B $-\frac{B}{C^{o7}}$	B <sup>o7</sup> add B <sup>b</sup> $-\frac{B^b}{B^{o7}}$
G13 $-\frac{C}{G7}$	C <sup>o7</sup> add D $-\frac{D}{C^{o7}}$	B <sup>o7</sup> add C <sup>#</sup> $-\frac{C^{\#}}{B^{o7}}$
G13(+11) $-\frac{A}{G7}$	C <sup>o7</sup> add F $-\frac{F}{C^{o7}}$	B <sup>o7</sup> add E $-\frac{E}{B^{o7}}$
Dim. 7th, functioning as a I <sup>#o7</sup> :		
C <sup>#o7</sup> add A $-\frac{A}{C^{\#o7}}$		
C <sup>#o7</sup> add C $-\frac{C}{C^{\#o7}}$		
C <sup>#o7</sup> add E <sup>b</sup> $-\frac{E^b}{C^{\#o7}}$		
C <sup>#o7</sup> add F <sup>#</sup> $-\frac{F^{\#}}{C^{\#o7}}$		

**TABLE 6****KEY OF C MINOR**

I min. chord family	II mi7 (b5) chord family	V7 alt. chord family
CmiMa9 — $\frac{G}{Cmi}$	Dmi9(b5) — $\frac{A^{b+}}{Dmi7(b5)}$	G7(+9) — $\frac{B^b}{G7}$
CmiMa13 — $\frac{Dmi}{Cmi}$	Dmi11(b5) — $\frac{C}{Dmi7(b5)}$	G7(+11) — $\frac{C^\#}{G7}$
CmiMa13 — $\frac{F}{Cmi}$	Dmi7(+5) — $\frac{B^b}{Dmi7(b5)}$	G13(b9) — $\frac{E}{G7}$
		G+7(+9) — $\frac{E^b}{G+7}$
		G+7(b9) — $\frac{A^bmi}{G+7}$

**CHORD PROGRESSIONS**

- 73) There are many possible chord progressions. Actually, any movement of a chord to another IS a chord progression, as the term merely implies the progress of one chord to the next.
- 74) What is usually meant by CHORD PROGRESSION is a standard chord progression. This means those specific movements of chords that have been established as typical normal progressions, simply by their continued use in hundreds of thousands of compositions.
- 75) In nearly all cases, these progressions have a solid, well-constructed relationship which sounds acceptable to our ear. There are many other possible ways of moving from chord to chord, but many of the unconventional possibilities are not practical BECAUSE THE RELATIONSHIP OF THE CHORDS INVOLVED DO NOT REINFORCE THE FEELING OF A TONALITY IN A WAY THAT IS ACCEPTABLE TO OUR EAR AND MUSICAL TASTE.
- 76) You should, therefore, first become familiar with the standard, conventional progressions that account for 95% of the compositions you will be arranging.
- 77) Original composition is still another dimension. The composer has to originate the progressions (which, in most cases, still end up being the standard progressions). THE ARRANGER MUST REACT TO THE COMPOSER'S BASIC HARMONIZATION (or choice of chord progression). He reacts to it by refining and adjusting it to suit his purpose of style and effort (i.e., the arranger manipulates the original chord progressions from his own point of view).
- 78) Most conventional progressions employing more than two or three chords are MODULATORY PROGRESSIONS. This means that the "progression," in fact, journeys through any number of DIFFERENT KEYS.
- 79) Your first responsibility is to recognize what key any chord is in, and consequently be aware of the modulatory adventures of any chord progression.

- 80) The particular KEY or KEY AREA is established by the use of CHORD FAMILIES. A chord family is a group of chords THAT FUNCTIONS IN THE SAME way within a key area.
- 81) The basic chord families are formed from the diatonic chords BUILT FROM EACH DEGREE OF A MAJOR SCALE OR HARMONIC, MELODIC OR NATURAL MINOR SCALES.
- 82) Those diatonic chords built from a major scale DEFINE THE CHORD FAMILIES FUNCTIONING AS A MAJOR KEY AREA. Those diatonic chords built from the harmonic, melodic or natural minor scales DEFINE THE CHORD FAMILIES FUNCTIONING AS A MINOR KEY AREA.

### THE MAJOR KEY AREA

- 83) Example 217 illustrates the diatonic four-part chords built from each degree of the major scale
- Ex. #217

Diagram illustrating the diatonic four-part chords built from each degree of the major scale (B-flat major):

- I: Bb7
- II: Cmi7
- III: Dmi7
- IV: Eb7
- V: F7
- VI: Gmi7
- VII: Ami7(b5)

The basic "cadence or ending progression," which is the foundation of the classical European harmony system, is the progression IV-V-I. Using Example 217 as a source, we would produce Eb-F-Bb.

- Notice that even though four-part chords are stated in Example 217, the basic triad of our three chords are all major.
- The strength of the major triads and the final resolution to the I or tonic was given the highest priority in early classical styles.
- The II or Cmi7 chord is related closely to the IV or Eb Major 7 or Eb6. (Three tones are common to both chords.) Consequently the II is an alternate for the IV chord.
- We can arrive at this conclusion: There are two basic three-chord progressions that have the strongest KEY AREA relationship.

### Ex. #218

Diagram illustrating two basic three-chord progressions (IV-V-I) in B-flat major:

- Progression 1: IV7 (Eb7) - V7 (F7) - I7 (Bb7)
- Progression 2: IImi7 (Cmi7) - V7 (F7) - I7 (Bb7)

- 84) In our modern day musical styles, the two progressions have these characteristic applications:

IV-V-I*Rock and Roll**Dixie**Country**Western**Folk*II-V-I*Jazz**Show Tunes**Most Songs (with lyrics)**Early Swing Era through**Be Bop*

- 85) What we are really saying, then, is that depending on the particular style of music, either the IV-V-I or II-V-I is the basic, definitive vertical application of the scale or key area.
- 86) Therefore each of these chords, the II<sup>mi</sup>7, IV<sup>maj</sup>; V7 or I, make up a chord family. This means, for example, that any form of a minor 7th (i.e., 9th, 11th, 13th) functions within a MAJOR KEY AREA in the same way.

THE MINOR KEY AREA

- 87) Example 219 illustrates the diatonic four- and five-part chords built from each degree of a C harmonic minor scale.

Ex. #219

Chords shown in Example 219:

- I: Cmi(Maj7) (Cmi6)
- II: Dmi7(b5)
- III: Eb7(+5)
- IV: Fmi7 (Fmi6)
- V: G7(b9)
- VI: Ab7
- VII: Bø7

- 88) The V chord in Ex. 219 (the G7, b9) has been extended one note farther (to the b9) than the other diatonic chords. This is because the chord does not become defined until the 9th has functioned as a flatted 9th.
- 89) Using Example 219 as a source, we can now produce the equivalent progressions in a minor key.

Ex. #220

Chords shown in Example 220:

- IVmi7 (IVmi6)
- V7(b9)
- Imi(Maj7)(Imi6)
- IIImi7(b5)
- V7(b9)
- Imi(Maj7) (Imi6)

- 90) We can combine the two progressions in a similar manner to represent the minor keys.
- (IIImi7, b5 -IVmi7) V7, b9 -Imi (maj 7) (Imi6)
  - When we see these chord symbols, or any portion or order of these symbols, **THEY ARE THE VERTICAL VERSION OF A "C" HARMONIC OR MELODIC MINOR SCALE.**
- 91) Every chord form we have covered, from 3 through 7 parts, is a variation of one of these chords: The IIImi7-V7-I, IV-V7-I in major or minor.

### APPLICATION OF BASIC CHORD FAMILIES TO CONVENTIONAL PROGRESSIONS

- 92) As stated previously, most conventional progressions are modulatory applications of the basic IIImi7-IV, V7, I in either major or minor key areas.
- 93) The following Example 221 illustrates a typical circle of 5th progression:

Ex. #221

C                      F#mi7(b5) B7(b9)      Emi7(b5) A7(b9)      Dmi7      G7                      Cma7

I in C Major      II - V in E Minor      II - V in D Minor      II - V - I in C major

- 94) Each bracket below indicates the specific, momentary key area involved. As you can see, even though this progression begins and ends in C major (establishing a home base or tonality) we do in fact move through two other key areas, E minor and D minor.
- 95) With this basic approach (of chord families) you can determine any momentary key area, on the basis of the chord symbols alone.

### STANDARD CONVENTIONAL CHORD PROGRESSIONS

- 96) For a complete breakdown of standard chord progressions in all styles (minor, blues, rock, modal, etc.), use Volume III of the Encyclopedia of Basic Harmony and Theory, Lessons 20, 21 (parts one and two).
- 97) These illustrate 119 basic progressions and provide a good over-all slant on progressions in most situations. Three 12-inch L.P. lecture/demonstration records are also available of all these progressions.
- 98) In keeping with the previous statement that the majority of longer chord progressions are actually modulatory, you should also be aware of the true implication of the key signature of a composition.
- 99) The key signature of a composition applies to the MELODY of the composition, and not the chords or harmonization of the composition. Any analysis of chord progressions shows us quite clearly that any measure of any tune can realistically be in any of the twelve major and minor key areas — regardless of the key signature being used.



## SECTION I — THE TECHNICAL FOUNDATION

## Chapter 3: Rhythm















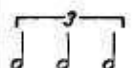
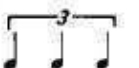




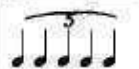
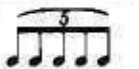







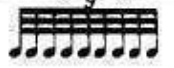

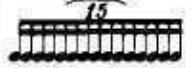
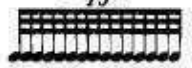
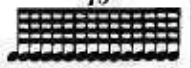












RHYTHM

- 1) This chapter will deal with the main rhythmic considerations important to the writer. Rhythm is the basic factor affecting anything we express musically. Consequently, it is essential that we communicate precisely how the music is to be rhythmically executed.

RHYTHMIC NOTATION

- 2) The following Table 7 defines the more conventional notations in relation to a "beat" or basic pulse.

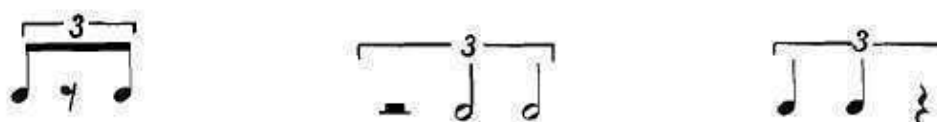
TABLE 7

	(a) 4 Beats	(b) 2 Beats	(c) 1 Beat	(d) 1/2 Beat Each	(e) 1/4 Beat Each	(f) 1/8 Beat Each	(g) 1/16 Beat Each
Row 1 Notes							
Row 2 Rests							
Row 3 Triplets							_____
Row 4 Uneven Rhythmic Combinations					_____	_____	_____
					_____	_____	_____
Row 5 Uneven Rhythmic Combinations	_____				_____	_____	_____
	_____				_____	_____	_____
	6 Beats	3 Beats	1 1/2 Beats	3/4 Beat	3/8 Beat	3/16 Beat	
Row 6 Dotted Notes							_____
Row 7 Dotted Rests							_____



- 3) In row 1, each notation equals the number of beats or fraction of a beat listed above the notation in columns a, b, c, d, e, f, and g.
- 4) In columns d, e, f and g, the examples in parentheses illustrate the method of writing groups of identical rhythms.
- 5) Row 2 shows the corresponding RESTS for each of the column headings.
- 6) Row 3 gives examples of TRIPLETS, meaning three equal attacks executed in the total amount of time normally allotted to two attacks.
- 7) Triplets can be also notated in many variations. These variations involve the replacing of any triplet attack with a rest of the same value (see Example 222) or the combination or tying together of any two adjacent triplet attacks. (See Example 223.)

Ex. #222



Ex. #223



- 8) It is also possible to SUB-DIVIDE triplet rhythms. However, care must be taken not to over-complicate this variation, as many players have difficulty in executing these more difficult rhythms.

Ex. #224



Ex. #225



- 9) The above examples are practical sub-divisions, particularly in 9/8 or 12/8 meters.



## METERS

- 10) Meter pertains to the time signature in which you base your arrangement. Selecting the correct time signature **WITHIN A FAMILY** (such as the  $\overline{4}$  family or  $\overline{8}$  family) is an important factor in communicating **YOUR RHYTHMIC CONCEPTION** to the players. Generally, when determining the specific signature within a family, the lower number (i.e., 4) reflects the tempo. The smaller the number, the slower the individual pulse. For example, 6/8 would be best when you wish the individual pulse or beats (the eighth notes in this case) to be moderately fast to fast. 3/4 would be best if you wished the pulse to be slow to moderately fast.
- 11) There is also the consideration of the natural accent that falls on the downbeat of each measure. Notice the comparative differences:

Ex. #226



Ex. #227



- 12) Example 226 has a natural accent **EVERY THIRD BEAT**, whereas Example 227 has its natural accent **EVERY SIXTH BEAT**. The correct choice should reflect the feel of the composition and/or your arrangement.
- 13) The following Table 8 breaks down the more practical time signatures used in our current musical styles and gives characteristics of each.

**TABLE 8****TABLE OF TIME SIGNATURES AND THEIR CHARACTERISTICS**

TIME SIGNATURE	CHARACTERISTIC USE	TEMPOS
2/2	Used infrequently in contemporary styles	Slow to Very Slow
2/4	Most commonly used commercially: polkas, reels, etc.	Bright
4/4 (C)	Conventional Jazz, Rock, Popular and Ballad Meter.	Slow to Fast
♩ = Alla Breve	Basic "show tempo." Strong accents on 1st and 3rd beats ("2 beat"). Used in Broadway show, dance, country and folk styles.	Fast to Very Fast
3/8	Used in contemporary styles. Some sophisticated jazz compositions make limited use.	Moderate to Fast
6/8	Used in jazz, jazz/rock styles	Moderate to Fast
3/4	The basic waltz meter. Used in popular, rock and jazz styles	Slow to Moderately Fast
6/4	Not commonly used. Typical in jazz and rock idioms.	Slow to Mod. Fast
9/8	9/8 has a basic pulse on the 1st, 4th and 7th beats, suggesting a primary waltz feel.	Moderate to Fast
12/8	Often used as a variation of 4/4, as 12/8 has a natural pulse on the 1st, 4th, 7th and 10th beats, corresponding to the four pulses in 4/4 time.	Slow to Moderately Fast
5/8	Seldom used in contemporary styles. Can be grouped as 3 + 2 or 2 + 3.	Moderate to Fast
5/4	Very popular meter for both jazz and rock idioms. Can be grouped as 3 + 2 or 2 + 3.	Moderately Slow to Moderately Fast
7/8	More prevalent in jazz/rock compositions. Many variations of groupings such as 4 + 3, 3 + 4, 2 + 2 + 3, 3 + 2 + 2, etc.	Moderate to Fast
7/4	Same grouping variations as 7/8. Used less than 7/8. Jazz/Rock style.	Slow to Moderate
11/8	Can be sub-divided many ways: 3 + 3 + 3 + 2; 3 + 2 + 3 + 3; 2 + 3 + 3 + 3; 3 + 3 + 2 + 3; 4 + 3 + 4; 2 + 1 + 2 + 1 + 2 + 1 + 2, etc.	Moderate to Fast

TEMPOS

- 14) It is always best to determine the exact tempo of an arrangement before you have written a great deal of the sketch. If you do not have a specific tempo in mind, it is very easy to fall into the trap of thinking rhythmically in more than one tempo, with the result that part of the arrangement has rhythmic figures TOO SLOW OR TOO FAST for the tempo.
- 15) One way to avoid this problem is to sing, play or tap the sketch from the beginning to the point you are presently at from time to time. This objective "review" of your rhythmic construction will enable you to evaluate just how "natural" the rhythms actually play or feel in a strict tempo.
- 16) Often, the rhythm of one particular phrase will be the KEY OF FINDING THE EXACT TEMPO. This means finding the one phrase that works only in a specific tempo.
- 17) Once the TEMPO OF THIS KEY PHRASE is locked in, you must check all other rhythmic patterns against this tempo and determine how naturally they fit.
- 18) It is best to notate this tempo with a metronome marking (i.e., m.m. ♩ = 108), eliminating any doubt or difference of opinion. If you only indicate "Slow Blues," you run the risk of anyone's individual opinion of just what this means.
- 19) You should, along with the metronome marking, give a verbal description which explains the basic style and concept that you wish. Any rock or jazz chart should always specifically be marked. This is because the interpretation of the eighth notes is entirely different.

CHANGING TEMPOS

- 20) Many arrangements contain anywhere from two to four or five tempo changes. The most natural means of going from one tempo to the next is to base both tempos on a "basic pulse" that remains the same. The verbal indication L'ISTESSO makes this clear.
- 21) Below are several examples of RELATED TEMPOS. (See Examples 227 to 231.)

Ex. #227     4/4 into ♩ = Second tempo exactly twice as fast.

Ex. #228     4/4 into 6/8 ( ♩ = ♪ ) = A quarter note in the first tempo is equal to an eighth note in the second tempo.

Ex. #229     4/4 into 3/4 = Tempo remains exactly the same.

Ex. #230     4/4 into 3/4 ( ♩ = ♩ ) = Two beats of the first tempo equals one measure of 3/4.

Ex. #231     3/4 into 6/8 = Second tempo exactly twice as fast.

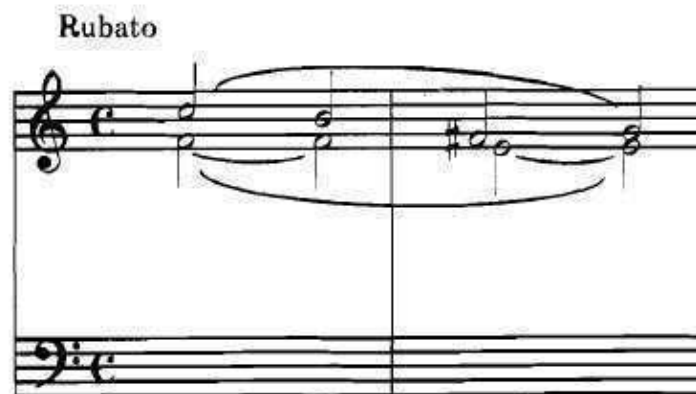
- 22) Any change of tempo need not necessarily be related to the preceding tempo. In many cases, you can give a relative description, as well as a new metronome marking.

Ex. #232: ♪ into 4/4 (slower than L'ISTESSO: m.m. = 80)

### RUBATO TEMPOS

- 23) To indicate an absence of a strict pulse, a marking of RUBATO, AD LIB TEMPO or FREELY should be used. In these cases, the section should, of course, be conducted.
- 24) The less complicated, rhythmically, a RUBATO section is written, the more flowing will be the execution. Syncopated rhythms are inconsistent with a free tempo.
- 25) Many times, some voices will move while other voices remain sustained. This can be notated in a different than normal fashion that makes it easier to follow.

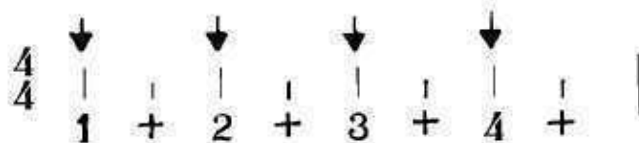
Ex. #233



### RHYTHMIC PHRASING

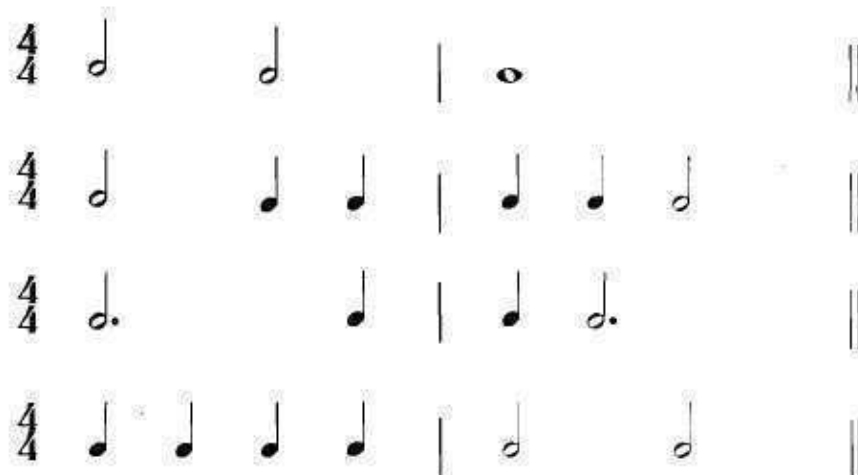
- 26) NON-SYNCOPATED RHYTHMS are comprised of combinations of whole, half, quarter, eighth, sixteenth notes and rests. Any pattern where the rhythmic attack falls on a downbeat in a measure is considered non-syncopated.

Ex. #234



- 27) The above example illustrates the rhythmic attacks falling on any of the four downbeats. The next set of rhythms are examples of non-syncopated rhythmic patterns.

## Ex. #235



- 28) Sub-dividing the beat provides more rhythmic variety but is still not considered syncopated. Here are some typical patterns where the quarter note has been sub-divided.

## Ex. #236



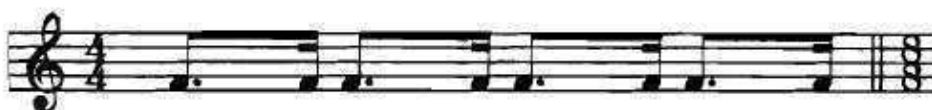
- 29) The interpretations of sub-divided beats have these interesting variations:

Ex. #237



( INTERPRETATIONS: )

Straight 8ths  
Played even (Rock)



Rolled 8ths  
Long-Short (Swing-Jazz)



Implied 12/8 Time  
Long-Short, but more even.  
(Blues-Jazz & Rock)

### SYNCOATED RHYTHMS

- 30) When a note or pattern is syncopated, the attack, normally falling on a downbeat, is moved to the left by an eighth, quarter or sixteenth note value. This is called an **ANTICIPATION**. In Example 238, the attack falls on the 1st beat of the second measure.
- 31) In Example 239, the attack of the 1st beat of the second measure is now anticipated by moving the attack to the left by an eighth note. The attack is now occurring half a beat sooner than in Example 238. The effect of an anticipation gives the pattern more of a "push."

Ex. #238



Ex. #239



- 32) The process of moving the original attack to the left can be accomplished by moving it in that direction, **TAKING THE TIME VALUE FOR THE ANTICIPATION FROM THE TIME VALUE ORIGINALLY GIVEN TO THE PRECEDING NOTE.** Thus the quarter note on the 4th beat of measure one in Example 238 has now become an eighth note. The **ANTICIPATION** borrowed the other half of the original quarter note on the 4th beat of measure one. This principle remains the same regardless of whether or not we are speaking of eighth, quarter or sixteenth note anticipations. (See Examples 240, 241, 242 and 243.)

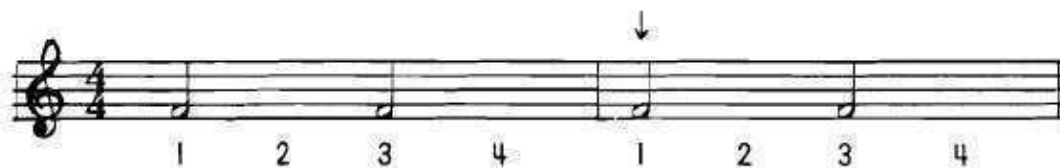
Ex. #240



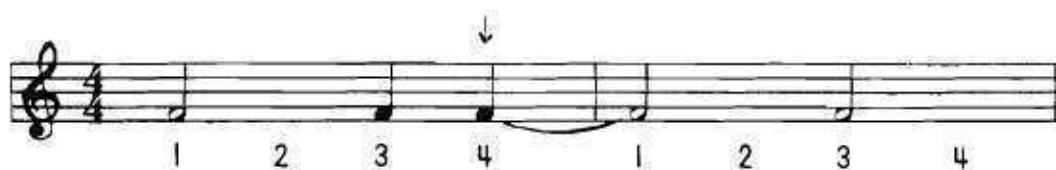
Ex. #241



Ex. #242



Ex. #243

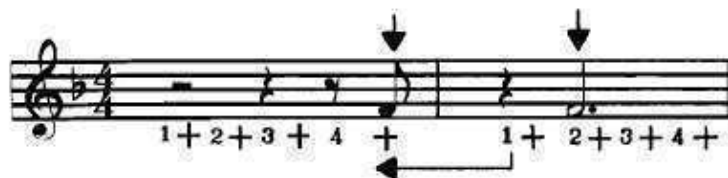


- 33) Below are more examples of anticipations utilizing many conventional applications. Each arrow identifies the use of the anticipation.

Ex. #244



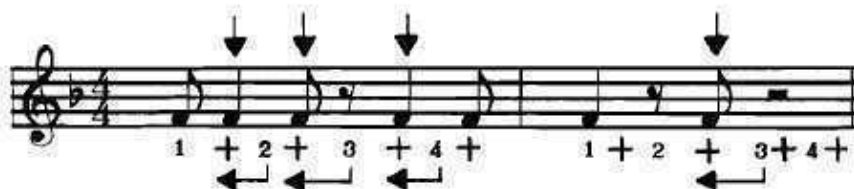
Ex. #245



Ex. #246



Ex. #247



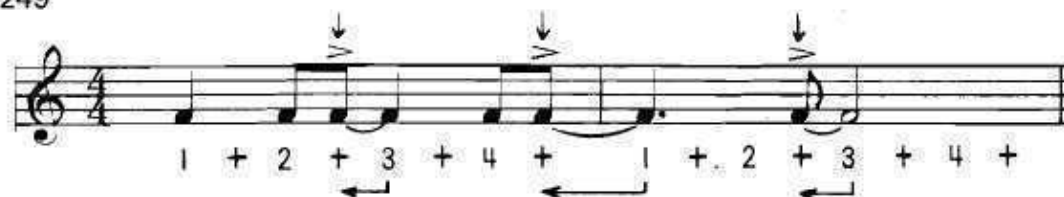
- 34) The conventional natural beats to be anticipated are the 1st and 3rd beats (in  $\text{C}$  and 4/4 time). They have the strongest tendency to be anticipated as they are the stronger of the four beats. (See Examples 248, 249.) The strongest beat in 3/4 meter is the 1st beat. In 5/4 meter, the 1st and 4th, or 1st and 3rd beats are the strongest. In 6/8 meter, the 1st and 4th beats.



Ex. #248



Ex. #249

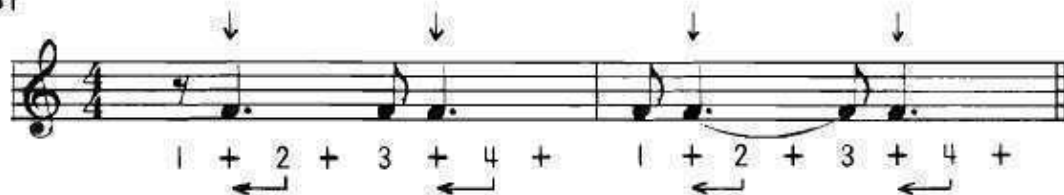


- 35) The weaker beats in the 4/4 measure (the 2nd and 4th beats) can also be anticipated in exactly the same fashion. In faster tempos it is more natural not to anticipate the weaker beats.

Ex. #250



Ex. #251

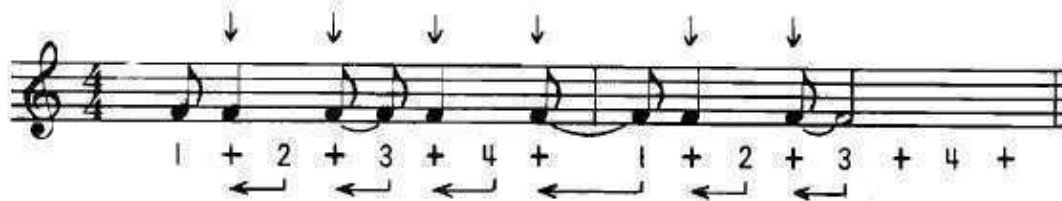


- 36) Combinations of strong and weak beat anticipations are possible.

Ex. #252



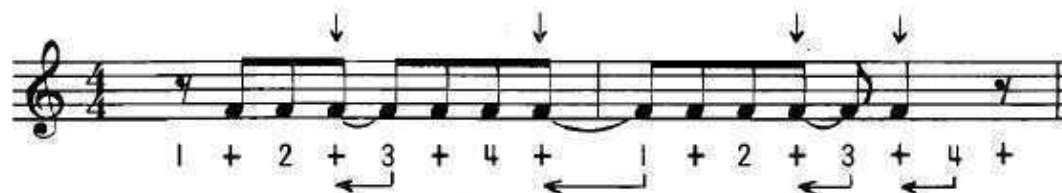
Ex. #253



Ex. #254



Ex. #255



### APPLICATIONS OF SYNCOPATED RHYTHMS

- 37) The process of applying syncopated rhythms to non-syncopated melodies is quite common, **HOWEVER, YOU SHOULD BE AWARE OF CERTAIN FACTORS.** You cannot assume that rephrasing a rhythm, making it syncopated, will automatically make your chart "swing." In many situations, the most effective and "swinging" feel comes from rather straight on-the-beat rhythms with the horns. The rhythm section provides the excitement and rhythmic variation because they are playing against the rhythmically simple horn parts.
- 38) The only way to determine the most effective extent of the syncopation is to:
  - a) Be aware of the impact of the rhythm section itself, particularly in relation to the tempo of your chart.
  - b) Sing and feel the pattern, in TEMPO. If you can't accurately sing or play it, it is usually a clue that you have made it too complicated.
- 39) **WHEN A MELODY NOTE IS ANTICIPATED WHERE A CHORD CHANGE OCCURS, ALL THE HARMONY NOTES UNDER THE MELODY NOTE ARE ALSO ANTICIPATED.**

DOUBLE METER

- 40) When conceiving your rhythmic approach to a chart, always be conscious of the possibility of doubling the values of all the notes and rests and the number of measures. This is usually referred to as **DOUBLE METER**.
- 41) This is a valuable solution when interpreting a ballad or melodically "busy" composition in a fast tempo.

Ex. #256



Ex. #257



- 42) In these examples, the actual length in time of each melody note is the same. However, in Example 257, the rhythm section is playing **TWICE AS FAST**.

HALF METER

- 43) By the same token, an original rhythmic pattern can be cut in half, giving you the effect of playing a slow moving melody (in a fast tempo), as a fast moving melody (in a slow tempo).
- 44) The next example of "Day In-Day Out" shows how the original composition is written.

Ex. #258



- 45) Example 259 applies HALF METER. Each of the note values in Example 258 is now cut in half;

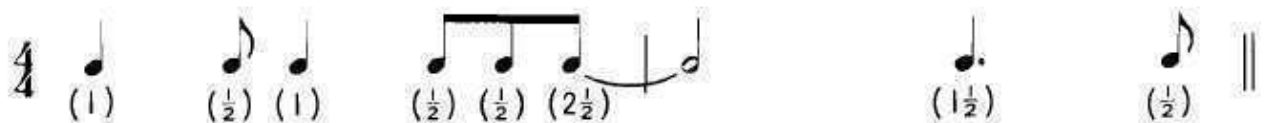
Ex. #259



### NOTATING SYNCOPATED NOTES

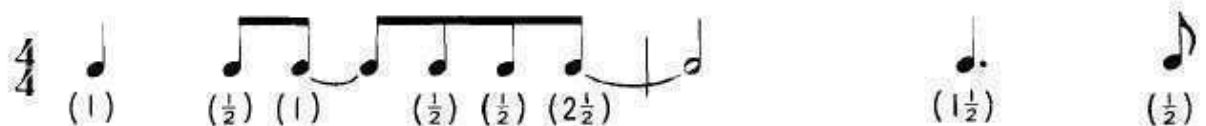
- 46) Care must be taken to divide correctly any syncopated note value that is tied over the 3rd beat of the measure. If written as a quarter note, it would look like this:

Ex. #260



- 47) Even though the downbeat of the 3rd beat is SILENT, the pattern should be written so that you can STILL SEE the downbeat of the 3rd beat. This is not possible in Example 260. The correct way to notate the quarter note value is as an eighth, tied to an eighth.

Ex. #261



- 48) If writing rock rhythmic patterns utilizing sixteenth notes and syncopations, the 2nd and 4th beats should be visible as well as the 3rd beat, in the same way as the 3rd beat is shown in Example 261. This is because the rock DOUBLE TIME rhythmic patterns are difficult to read. By clarifying all FOUR BEATS, it becomes much easier to read. The 8/8 rock meter is more clearly defined.



## SECTION II — MELODIC HANDLING AND VARIATION

### Chapter 4: Melodic Function and Articulation

- 1) Consideration of the role of melody in arranging should be centered on the definition of melodic tones in terms of their relationship with chordal and tonal considerations.
- 2) It is possible, by an awareness and intelligent analysis of melodic functions, to relate **SPECIFIC MELODIC IMPRESSIONS** to the other factors of writing, such as **HARMONY** and **RHYTHM**.
- 3) Melodies have, as their source, scales. These practical scale beginnings are defined in Chapter Two. With these scales (i.e., horizontal combinations of notes) comes the knowledge of how we restrict our selection of certain of the twelve possible tones into pre-selected melodic possibilities.
- 4) Melody (along with rhythm) is one of the most easily conceived components of music. The exposed position of the melody obviously draws attention to it, and by this same token invokes responsibility. **IT MUST BE NATURAL AND IT MUST BE RIGHT.**
- 5) The melody (and its accompanying rhythm) is really the starting point of any arrangement. In this uncomplicated stage, a musical judgment can be made on the basis of the melody alone, with its companion ramifications: rhythm, articulation, style and register.
- 6) A definition of melody should be in its aural perspective. We can **SING** a melody, and consequently we are able to conceive and **HEAR** the melody within us. It cannot be mechanical or assumed. The primary approach to arranging is to **SING** or **HEAR** everything, and, of course, the melody is the most obvious component to sing.
- 7) An established approach to hearing a melody and **KNOWING** what you are singing is through the use of solfeggio. The following table defines the ascending and descending solfeggio syllables applied to the key of C. (See Table 9.)

TABLE 9

The image displays two musical staves, each with a treble clef and a key signature of one sharp (F#), representing the key of C major. The first staff shows an ascending scale with notes C, D, E, F, G, A, B, C, D, E, F, G, A, B, C. Below each note is a solfeggio syllable: DO, DI, RE, RI, MI, FA, FI, SO, SI, LA, LI, TI, DO. The second staff shows a descending scale with notes C, B, A, G, F, E, D, C, B, A, G, F, E, D, C. Below each note is a solfeggio syllable: DO, TI, TE (TA), LA, LE, SO, SE, FA, MI, ME (MEA), RE, RA, DO. The syllables in parentheses are placed below the line of the staff.

- 8) The black noteheads represent the chromatic notes of the C major scale; the white noteheads represent the diatonic tones. The syllables in parentheses articulate the discrepancies in some of the pronunciations.
- 9) By transposing these syllables to the remaining scales, you have used a MOVABLE DO concept (i.e., DO is always the tonic of a scale). A FIXED DO uses Table 9 and its syllables for all keys (i.e., an F major scale would be: fa so la ti do re mi fa).
- 10) The MOVABLE DO is most generally used today, and it is well worth the effort to memorize and apply this approach. Developing your ear through the practice of singing solfeggio can be a great asset in increasing your ability to HEAR melodies and chords. Singing melodies out loud or in your head can become an automatic, spontaneous habit that can develop your ear.

### CHORD FUNCTIONS

- 11) Chord structures are possible from the tonic of each of the basic chord families (review Tables 1 through 4) up to seven tones (13th chords).
- 12) A melody note that functions in relation to a chord symbol is called a CHORD TONE. The root, 3rd, 5th and 7th (or 6th) of a chord are considered BASIC CHORD TONES. A melody note functioning as the 9th, 11th or 13th (or altered 9th, 11th and 13th) of a chord are considered CHORD EXTENSIONS.

Ex. #262



Ex. #263



- 13) Most chord symbols that you work with are written as triads, 6th, 7th and 9th chords. Accordingly, the notes of the melody can be easily identified as BASIC CHORD TONES or EXTENSIONS in relation to the chord symbols of a lead sheet.

PASSING TONES

- 14) Passing tones are those melody notes occurring on weak beats or up beats of a measure that **CONNECT TWO BASIC CHORD TONES**. Although the melody notes marked with X's can be analyzed as an 11th and 9th of an F major chord, they are functioning as passing tones connecting (1) the chord tones C and A, and (2) the chord tones A and F.

Ex. #264



- 15) There are two types of passing tones, **DIATONIC** and **CHROMATIC**. The passing tones in Example 264 would be considered **DIATONIC** as the melody is constructed from the F major scale, and both tones (Bb and G) are diatonic to that scale.

Ex. 265



- 16) In Example 266, the B natural and Gb are chromatic to the F major scale and would then be considered **CHROMATIC PASSING TONES**.

Ex. #266



An awareness of diatonic and chromatic passing tones is very helpful in determining passing chords. (See Chapter Eight.)

NEIGHBORING TONES

- 17) NEIGHBORING TONES function differently than passing tones in that they do NOT connect chord tones. Instead, a neighboring tone leads into or out of a chord tone.

Ex. #267



- 18) Neighbor tones also function as either an UPPER DIATONIC OR CHROMATIC NEIGHBOR TONE or LOWER DIATONIC OR CHROMATIC NEIGHBOR TONE.

Ex. #268

EMBELLISHMENTS

- 19) Embellishments such as GRACE NOTES and TURNS can add a great deal to many melodic situations. The way to determine where you wish to add an embellishment is to sing the melodic phrase and feel where the added ornament is needed. Example 269 presents a theme from my composition SOUNDScape.

Ex. #269

MOD. BOSSA NOVA TEMPO





- 20) At reference point 1, a grace note has been added, functioning as an **APPOGGIATURA**.<sup>\*</sup> Point 2 illustrates a turn applied to an original Eb quarter note on the fourth beat. Point 3 shows a grace note **SKIPPING** by a major 6th interval into the third beat. Point 4 shows the use of two grace notes approaching the melody note "C" on the downbeat. (Groups of three and four grace notes are not unusual in slow and medium tempos.

### MELODIC ARTICULATION

- 21) One of the arranger's prime responsibilities is to communicate to the individual players exactly how the musical phrases should be articulated or phrased.
- 22) The indication for a quarter note played short or long, accented, etc., is indicated by a series of markings detailed in Table 10. These markings are placed above the notes on **EACH INDIVIDUAL PART IN THE TRANSPOSED SCORE**.
- 23) The syllables below the notes are to demonstrate vocally the type of attack and duration of the principal markings.

<sup>\*</sup>Appoggiatura: a leaning note; grace note; note of embellishment.

TABLE 10

### ARTICULATION MARKINGS



DO BA DO BA

**LEGATO** — Indicate by slur over notes. No separation between notes.



DUT

**STACCATO** — Dot indicates short duration, i.e.,



BAA

**TENUTO** — Line indicates Legato Tongue; full value, long, broad.



BOPI

**SHORT ACCENT** — Hard, short, heavy accent, i.e.,



DOO

**LONG ACCENT** — Indicates hard, heavy accent; full value.

TABLE 10 (continued)



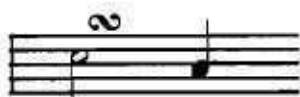
SHORT GLISS DOWN – Indicate "short."



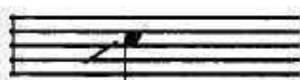
LONG GLISS DOWN – Indicate "long."



SHAKE – Indicate "slow" or "wide."



TURN – Lip turn rises then slurs into lower note.

SHORT GLISS UP – Indicate "1/2 valve" or "open" for brass.  
Indicate "short."LONG GLISS UP – Indicate start of gliss; "1/2 valve" or "open"  
for brass; indicate "long."

SWALLOW TONE – An implied pitch, not definite; less weight.



CLOSED (DU) – Muffled sound; used with plunger, hat, or hand.



OPEN (WAH) – Full sound, indicates release of plunger, etc.

TABLE 10 (continued)



GROWL – Indicate verbally. More effective in low register.



DOIT – Gliss upwards after sounding note.

- 24) Articulation can be disastrous if approached mechanically; if it is over or underdone or indicated inconsistently. The key to determining WHAT to mark, and WHICH mark to use is to sing any phrase, relating syllables (not SOLFEGGIO) to corresponding markings as shown in Table 10.
- 25) The following melodic phrase from my composition SCUFFLE represents a typical problem in determining the articulation markings to use.

## Ex. #270

DO BA DO BA DO BA DO BA DO DUT DOO BA DO DUT

DOO DUT DO BA DA DO DUT DO BA DOO BAA DO BA BAA DO DOO

DO BA DO BAA BA BAA BAA BAA BA DO BA DO BA DO BA

- 26) Obviously, you do NOT have to sing the same syllables as shown in Table 10, but you DO need to work out your own personal, accurate means of relating the way you "hear" or sing a phrase to exactly the correct marking.
- 27) The articulations have to be natural, NATURAL ENOUGH TO SING. Once you mark a phrase, SING it back, reading precisely the markings you have written. If it sounds stilted or awkward, you have misinterpreted what you originally sang.



## SECTION II — MELODIC HANDLING AND VARIATION

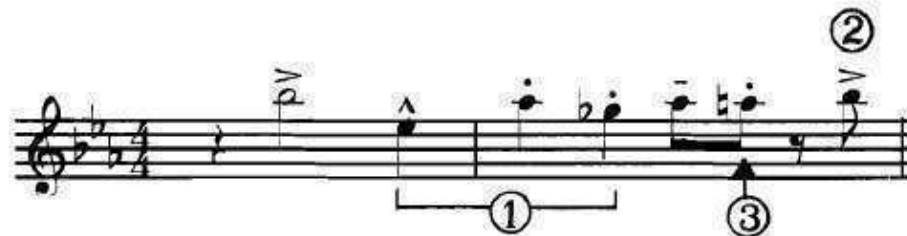
## Chapter 5: Melodic Phrasing


- 1) One of the first steps in arranging is the sketching of a melody. Although the melody may not be assigned to specific instruments until later, your lead melodies should be rhythmically phrased and articulated.
- 2) Your rhythmic phrasing, therefore, has to reflect the particular style of your arrangement. In turn, the melodic articulations also must consistently reinforce the musical style.
- 3) The decisions necessary to effectively finalize the melodic lead always relate to **WHAT YOU HEAR OR SING**. If, however, lack of experience makes it difficult for you to know if you are accurately conceiving your phrasing in a specific style, you should study the following stylistic examples and general rhythmic and articulation characteristics.


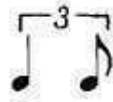
JAZZ PHRASING TIPS

- 4) Always define how quarter notes should be articulated . . . short, long, accented, legato, etc. (See Example 271, point 1.)
  - a) Eighth notes do not always need specific markings. However, when an eighth note is an anticipation it usually, naturally, has an accented attack. (See Example 271, point 2.)
  - b) When an eighth note is followed by a rest, it is usually articulated short (staccato) or long or short accent. (See Example 271, point 3.)



Ex. #271



- c) Decide how you want eighth notes played: **EVEN**,  (ballads and fast tempos) or **ROLLED**,  (moderately slow to moderately fast). If the tempo is such that you wish the eights rolled, you do not have to write each pair of them

 or  Instead, verbally indicate at the beginning of the chart: "Rolled Eighths."

- d) Be clear in your mind about the true length of a note. If it is short, then it should be

written  or . If the duration is two beats or more before the next attack, the note value should read that way. (See Examples 272, 273, point 1.)

Ex. #272



EFFECTIVE – CLEAR

Ex. #273



INEFFECTIVE – UNCLEAR  
(Neither long nor short; short, choppy effect)

- e) If a note value is long (half, whole, etc.), the type of accent will be long (Example 274), unless a specific type of attack is desired. (See Example 275.)

Ex. #274



Ex. #275



- f) In most instances a group of triplet eighth notes followed by a rest will be awkward rhythmically.

Ex. #276



Ex. #277



- g) In a jazz or swing style eighth notes are not articulated short unless as mentioned before in b and c.

### BALLAD PHRASING

- 5) Avoid measure after measure of whole and half note sustained background or melody. It is important to **THINK AS A WIND INSTRUMENT PLAYER**, producing sounds by breath rather than, for example, as a pianist.

There are several very simple ways to obtain the effect of a constant "pad" or melody without literally writing it that way. Example 278 represents a ballad background lead line.

Ex. #278



- 9) TRY SINGING BALLAD PHRASES YOU WRITE. If YOU run out of breath, the players won't be far behind you.
- 10) In a slow tempo a whole note can present several problems, i.e., where does the cutoff occur? The following examples show several solutions to this problem, which, in every instance, you have to decide and notate accordingly.

Ex. #282



OFF?

Ex. #283



Ex. #284



Ex. #285



- 11) Try to conceive ballad phrasings as legato statements rather than short, interrupted, choppy fragments. This is a basic way of thinking to obtain a smooth flow.

### ROCK PHRASINGS

- 12) A jazz/rock chart can actually use conventional jazz phrasings for the horns, with a rock rhythm section, or any degree of authentic rock phrasings for horns. Decide exactly WHERE your chart fits in this type of conception.
- a) In the more authentic big band rock phrasings, eighth notes are usually phrased short.

Ex. #286



Always specifically define eighth and quarter notes.

Ex. #287



- b) Double time figures (like BLOOD, SWEAT AND TEARS brass figures) involve complicated notation and articulations. Define everything.

Ex. #288


DOUBLE TIME FEEL



- c) Indicate verbally when using a double time rhythmic pattern. It helps the players feel the "double" patterns. (See Example 288.)

### COMMERCIAL WRITING TIPS

- 13) When arranging commercial instrumental, dance or vocal background charts on standard and Broadway show tunes, much less syncopation is used rhythmically. In fact, the more basic and uncomplicated the approach you use in this style of arranging, the more it will be in character.

- a) Anticipations are used, but more frequently in fast cut time (  ) tempos.

Ex. #289

BRASS FILL





Note that in cut time, anticipations are by a **QUARTER NOTE RATHER THAN BY AN EIGHTH NOTE**. (This is typical of swing and jazz styles.)

- b) Many commercial slow tempos actually have a 12/8 feel as opposed to straight 4/4. Styles such as the "soft shoe" use short triplet eighth notes for movement, implying the 12/8 feel.

Ex. #290



- c) Groups of even eighth notes (see Example 293) and quarter note triplets (see Example 294) are also characteristic. Example 294 illustrates the broad suspended effect the legato triplets produce.

Ex. #293



Ex. #294



- d) Typical background rhythmic figures are built around the basic Bossa Nova pattern.

Ex. #295



Ex. #296



15) SAMBA

- a) The bright tempo of the Samba has a basic two beat feel. Rhythmic patterns, therefore, can be syncopated. The next examples illustrate some typical patterns:

Ex. #297



## Ex. #298



- b) Long strings of even eighth notes are characteristic woodwind fills, whereas more sustained background pads can be as simple as whole and half notes.
- c) A basic pattern for brass is shown at Point 1 in Example 297.

16) RHUMBA, CHA CHA, MAMBO

- a) These Latin styles use a basic staccato phrasing, particularly with eighth notes, which are always played even.

## Ex. #299

17) BEGUINE

- a) The Beguine is generally a more legato style, however, even staccato eighth notes are also typical.

## Ex. #300



## SECTION II — MELODIC HANDLING AND VARIATION

### Chapter 6: Melodic Development

- 1) The greatest source of melodic material to an arranger is actually the **BASIC THEMATIC MATERIAL OF THE COMPOSITION** he is arranging. Relying on thematic material as a source obviously and automatically provides a high degree of continuity and does much to add flow and consistency to a chart.
- 2) To effectively use the **BASIC THEMATIC MATERIAL** an arranger must have the flexibility to re-interpret the material to produce any effect he wishes. This manipulation of thematic material is accomplished by several techniques which can be used to produce:
  - a) Introductions, turnarounds, interludes
  - b) Background figures
  - c) Counter-melodies and obligatos
  - d) Thematic bridges from one section to another
  - e) Stylistic development sections
  - f) Dramatic effects, such as climaxes, endings
  - g) Counterpuntal treatments
- 3) The first step is to isolate and define the factors that are available. The major factor is a total awareness of the melodic phrases of the original composition. Depending on the tempo and meter, most phrases will be one, two, three and four measures in length. Always familiarize yourself with the construction and form of the composition. We will use the following example to help define the **MELODIC MATERIALS**.
- 4) **CAN'T BELIEVE IT BLUES** has a basic **MOTIF** (see Example 301) which has been developed into a two measure phrase (see Example 302, Point 1).

Ex. #301



## Ex. #302

**SLOW BLUES**

SC

- 5) The 3rd and 4th measures are a **SEQUENCE** (Point 3) of the initial 2 bar phrase with rhythmic variation. A pickup has been added (Point 4) and a note extended in length (Point 5). The perfect 5th formed by the last two notes of the basic phrase (Point 2) now has an additional note (Point 6) when the perfect 5th is repeated in measure 4 (Point 7).
- 6) Measures 5 and 6 are another sequence of measures 1 and 2 (see Point 8). Fewer pickups are used this time (Point 9). The subtle variations of the first two measures (Points 4, 5, 6 and 9) are typical devices used to avoid the monotony of uninspired, literal exact sequences. Measures 5 and 6 also are varied in the sense that the basic harmonization is an  $A\flat 9$  chord instead of an  $E\flat 9$ .
- 7) Measures 7, 8 and 9 are again based on the initial two measure phrase (Point 1). However, the additional pickup (Point 10) is like Point 4, and the extension of the  $B\flat$  (Point 5) is again used (Point 12). This sequence (measures 7, 8 and 9) of measures 1 and 2 has been extended into a three measure phrase, using the minor 3rd fragment (Point 6 and Point 13) as an extension device leading to the perfect 5th ( $B\flat$  to  $E\flat$  — Point 14).
- 8) This type of melodic construction is called **FRAGMENTARY DEVELOPMENT** and is a very useful and valuable source of melodic thinking.

- 9) Measure 10 at first glance seems to be a new melodic idea (Point 15) but it is actually a **FRAGMENTARY USAGE** of the first two notes of measure one. Point 16 is a rephrasing of Points 5 and 6. Point 17 is a sequence of Point 6.
- 10) A **SEQUENCE** can be a **STRICT** transposition, meaning it is an **EXACT DUPLICATION OF AN ORIGINAL PHRASE**, or it can be **DIATONIC**, meaning it can have the **IDENTICAL SHAPE AND RHYTHM** but placed a different place diatonically in the scale, creating different intervals.
- 11) Any **SEQUENTIAL** phrase can therefore be varied with the:
  - a) Addition of notes
  - b) Deletion of notes
  - c) Extension of note values
  - d) Contraction of note values
  - e) Transposition or replacement of thematic material
  - f) Inversion, octave inversion, retrograde positions.
- 12) **FRAGMENTARY DEVELOPMENT** can be employed by using any fragment (any number of notes, an interval, a rhythm) from the original phrase as the basis of a new related melodic phrase as detailed in the example of **CAN'T BELIEVE IT BLUES**.
- 13) Fragmentary development is a vital concept because it presents such a flexible way of looking at possibilities. The ultimate in thematic manipulation is to achieve any **EFFECT** needed, based on original material. This is the area that provides the continuity of ideas that mark a well written chart.
- 14) The relationship between a melody, inspired by fragments of the original material and the original material itself is **NOT ALWAYS AN OBVIOUS RELATIONSHIP**. Rather, its strength shows itself in the overall impact, an impact which makes the player feel that every note in the chart belongs there.
- 15) This concept also lends strength to the first stage, the sketching of an arrangement. Sketching your lead melodies and rhythmic phrasings enables you to concentrate entirely on these factors, making sure they are as musical as possible. This is where the decisions affecting the continuity and flow of a chart are determined.
- 16) The following lead sketch of **CAN'T BELIEVE IT BLUES** will serve to illustrate the application of these various melodic techniques to produce the effects listed a) through f) in Paragraph 2. This is a blues form composition and the primary melodic scale is the blues scale. We will now follow through the development of the basic motif (Example 301) and trace its thematic relationship throughout this sketch.





Handwritten musical score for a jazz arrangement, featuring ten staves of music with various chords and performance instructions.

**Staff 1:** Chords:  $A\flat 9$ ,  $E\flat 9$

**Staff 2:** Chords:  $A\flat 9$ ,  $E\flat$ ,  $C+7(b9)$ ,  $F_{mi}7$ ,  $B\flat 7(b9)$

**Staff 3:** Section **E** (43-49). Chords:  $E\flat 9$ ,  $A\flat 7$ ,  $A\flat 9$ ,  $A\flat 7$ ,  $E\flat 9$ ,  $A\flat$ ,  $E\flat 9$ ,  $A\flat 7$ ,  $E\flat 9$ ,  $A\flat 7$ . Instruction: (ONCUE)

**Staff 4:** Chords:  $A\flat 9$ ,  $A\flat 7$ ,  $E\flat 9$ ,  $A\flat 9$ ,  $E\flat 9$

**Staff 5:** Chords:  $A\flat 9$ ,  $A\flat 7$ ,  $A\flat 9$ ,  $A\flat 7$ ,  $E\flat 9$ ,  $A\flat$ ,  $F_{mi}7$ ,  $B\flat 7(+9)$ . Instruction: (END SOLO)

**Staff 6:** Section **F** (51-61). Instruction: (DOUBLE TEMPO)

**Staff 7:** Chords:  $A\flat 9$ ,  $A\flat 7$ ,  $E\flat 9$

**Staff 8:** Chords:  $A\flat 9$ ,  $E\flat 9$ ,  $E\flat 9$ ,  $A\flat 9$ ,  $E\flat 9$ ,  $D\flat 9$

**Staff 9:** Section **G** (63-73). Chords:  $E\flat 9$ ,  $A\flat 9$ ,  $A\flat 7(b9)$ ,  $E\flat 9$ . Instruction: (TENOR SOLO)

**Staff 10:** Chords:  $A\flat 9$ ,  $E\flat 9$



Handwritten musical score for a tenor saxophone solo. The score is written on a single staff with a key signature of two flats (B-flat major) and a common time signature (C). The tempo is marked 'Moderato'. The score is divided into sections labeled H, I, and II. Section H starts at measure 81 and ends at measure 92. Section I starts at measure 93 and ends at measure 104. Section II starts at measure 105 and ends at measure 116. The score includes various musical notations such as notes, rests, dynamics (f, p, cresc), and articulation marks (accents, slurs). Chord symbols are written above the staves: Ab9, Eb9, C+7(b9), Fmi7, Bb7(b9), Eb7, Ab9, Eb9, Ab9, A07, Eb9, D9, Eb9, D9, Eb9, Ab9, Eb9, C+7(+9), Fmi7, Bb7(b9). The score also includes performance instructions: 'SK'S-PLAY ON CUE' and 'BRASS-PLAY ON CUE'. The score ends with the instruction '(END TEN. SOLO)'.

**J** PLAY 1X, REPEAT ON CUE

109 Eb9 Ab9 Eb9

113 G9 Ab9 Eb9

(TRUMPET SOLO)

117 Ab9 Eb9

**K**

121 Eb9 Ab9 Eb9

125 G9 Ab9 Eb9

129 G9 Ab9 A07 Eb9

DR. FILL

**L**

133 Eb9 Ab9 D9 Eb9

(END TRUMPET SOLO)

137 Ab9 Eb9 C+7

Fmi7 Ab9 Eb9 C+7 Fmi7 Bb7(b9)

**M**

141 Eb9 D9 Ab9 F7(+9) Eb7(+9) Eb7(+9) Eb7

145

Handwritten musical score for a piano arrangement, featuring various chords and melodic lines across five systems.

**System 1 (Measures 149-152):**

- Chords:  $Ab13$ ,  $D9$ ,  $Eb9$ ,  $D9$ ,  $Eb9$ ,  $Db9$ ,  $C9$

**System 2 (Measures 153-156):**

- Chords:  $Fmi7$ ,  $Ab9$ ,  $Eb$ ,  $C13$ ,  $Fmi7$ ,  $Cb9$ ,  $Bb7(b9)$

**System 3 (Measures 157-160):**

- Chords:  $Eb9$ ,  $Ab9$ ,  $Eb9$

**System 4 (Measures 161-164):**

- Chords:  $Ab9$ ,  $A07$ ,  $Eb9$

**System 5 (Measures 165-168):**

- Chords:  $Ab9$ ,  $\frac{1}{2}$  TEMPO,  $Ab$ ,  $C9$ ,  $Fmi7$ ,  $Bb7$

**System 6 (Measures 169-172):**

- Section: CODA  $Ab9$
- Chords:  $Eb9$
- Dynamic: *mf*
- Ending: *fine*

Other markings include a circled 'N' in measure 153, a circled 'C' in measure 165, and a circled 'F' in measure 172.

### THEMATIC DEVELOPMENT AS A MEANS OF PRODUCING VARIOUS ELEMENTS

#### A. INTRODUCTIONS

- 17) Letter A constitutes one chorus of blues used as an introduction. The phrase in measures 1 and 2 is based on the original motif.

Ex. #304



- 18) Example 304 shows the rhythmic rephrasing and the addition of the passing tone "Db." Grace notes have been used to embellish the phrase.

#### B. BACKGROUND

- 19) Letter E is the first background section behind the solo which started in Letter D. Notice the similarity in measure 49 to the last three notes of the original motif (Example 301); compare measures 51-53 to measures 15-16; 53 to 24; 55-56 to 15-16, 57-58 to 22-23. All of these comparisons bring out the different variation possibilities as listed in Paragraph 2, a to f.
- 20) Another background figure is used at Letter J. The original motif (Example 301) ended with a perfect 5th interval, Bb to Eb. The figure used in measures 109-110 is a fragmentary development of this Bb to Eb interval, using octave inversion. Letter K develops the figures introduced in Letter J for a more complete chorus of background.

#### C. COUNTERMELODIES AND OBLIGATOS

- 21) At Letter F, a new theme (see Example 305) is played with the countermelody starting in measure 62 (Example 306).

Ex. #305

MOD. FAST BLUES



Ex. #306

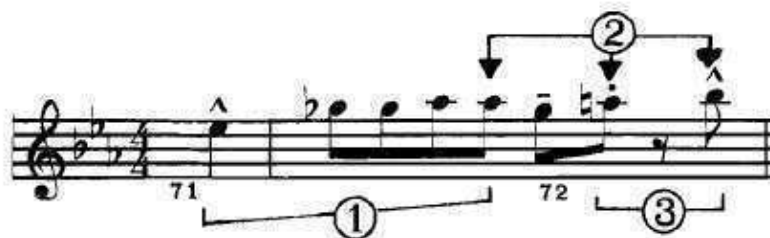


- 22) Point 1 in Example 306 is the reverse of the original motif (Eb, C, Bb). Point 2 is a re-use of Point 6 in Example 302. The rhythmic statement for measures 62-65 moves rhythmically in relation to the main theme of Letter F (review Example 302).
- 23) The figure in measure 68 is an answer or sequence of the preceding measure 67, illustrating again how a sequential pattern can be used to function as a counter-melody.

#### D THEMATIC BRIDGES

- 24) THEMATIC BRIDGES function as overlapping melodies that link one section to another. Measures 71-74 in Letter F bridge from the end of one blues chorus into Letter G. Measure 71 is again based on the last two notes of the original motif (Bb to Eb).
- 25) Example 307, Point 1, is a transposition and reversal of a fragment of the original motif.

##### Ex. #307



- 26) The notes indicated by the arrows, Point 2, in measure 72 are restated in measures 73-74.
- 27) Measures 77-79 function as a background figure and are based on Point 1 in Example 307 (measures 77-78) and Point 2 (measures 78-79).

#### E. DEVELOPMENT SECTIONS

- 28) This is a term we shall use to designate a section of a chart that has the effect of a NEW THEME. However, by using the many techniques of sequence, inversion and fragmentary development, the "new" theme, although seemingly new, can actually be based on "old" thematic material.
- 29) The overall effect on the listener is hearing new thematic material, but because of the use of already established fragments, a continuity and flow has been built into the new section.
- 30) Measures 133-134 are based on the Bb to Eb fragment and Point 2 in Example 307. The introduction of the half-step melodic movement (Point 3, Example 304) is again utilized in measure 137.

- 31) Measures 138-139 are based on Point 6 in Example 302, and the half-step fragment mentioned above. Example 308 explains:

Ex. #308



- 32) Measures 145-147 are a rephrasing of measures 133-134. Measure 146 is an inversion of 134, leading into the Bb-Eb fragment.
- 33) Measures 149-150 and 151 rephrase measure 134.
- 34) Measures 167-168 are a sequence of measures 59-60, bridging the change of tempo each time.

### DRAMATIC EFFECTS (CLIMAXES, ENDINGS)

- 35) **CLIMAXES:** The peak climax in this chart occurs in L and M. Consequently, this entire 24 measure section functions as a peak, and as we have just discussed, is actually based on fragmentary melodic development of existing thematic materials. By varying the rhythm, I was able to add to the strength of this section.
- 36) **ENDINGS:** the final measures (170-173) are based on the opening chorus of blues, again with rhythmic variations. The first four notes in measure 1 are extended in measures 170-171 by continuing the sequence. Measures 172-173 are the same as 170-171, up an octave.

### SUMMARY

- 37) The techniques just covered must not be mechanically and slavishly followed. Rather, they should be constantly considered as guidelines along which you may create emotional, feelingful, imaginative arrangements, which "sing" well because they are based on the principles I enumerate in Paragraph 2. However, all these points are valid and should always be kept in mind:
- a) A minimum of original thematic materials are needed.
  - b) By understanding the variations on any original thematic material, IT IS POSSIBLE TO MANIPULATE THE THEMATIC MATERIAL TO FUNCTION IN ANY NUMBER OF WAYS IN AN ARRANGEMENT.
- 38) Many of these techniques actually occur to a writer intuitively. However, constant awareness of thematic development can be a great aid in refining and finalizing the melodic material of your arrangement.



### CONTRAPUNTAL APPROACHES

- 39) A great of modern jazz and jazz rock music is based on a horizontal rather than a vertical (chordal) conception.
- 40) The DENSITY concept also embraces a natural counterpoint style as a form of two, three and four part density. This is particularly so from the standpoint of orchestration. (Refer to Chapter 13 for orchestral possibilities, Paragraph 15 to 31.)

### WHAT IS COUNTERPOINT?

- 41) Counterpoint is two melodies played simultaneously. Although there can be a vertical relationship between the two voices, the most intriguing aspects are melodic and rhythmic.
- 42) This book will not involve itself with the classical approach to counterpoint, learning the various species, etc. Instead, it will deal with practical contrapuntal-like applications based on scales, and harmonic implications in relationship to contrasting rhythms.
- 43) The main considerations are:
  - a) The rhythmic interplay between the voices.
  - b) The melodic and intervallic relationship of the voices.
  - c) Harmonic (vertical) implications.
- 44) Modern counterpoint, as all aspects of arranging, relies on our own natural intuition as a resource. I feel it is important that a technique as seemingly academic as counterpoint remain as natural and uncontrived as possible.

### RHYTHMIC CONSIDERATIONS

- 45) The rhythmic style of a contrapuntal passage or section takes its character from the general style of the music you are arranging. (See Chapter 4.) If you are writing a blues, for example, the rhythmic character would remain consistent whether an ensemble or contrapuntal section. If, for example, you should want a contrasting section of a rock chart to be a contrapuntal madrigal, the rock idiom would still be the source of your rhythmic definition.
- 46) The principal hangup rhythmically (apart, then, from rhythmic style) is the amount of awareness and control a writer has of two or more rhythms being played at the same time. Counterpoint does not automatically imply constant eighth or sixteenth notes. In our modern musical idioms, especially the jazz idiom this would rapidly decline in interest because of the monotony and lack of rhythmic variation.
- 47) With this in mind, the most effective, interesting counterpoint (scored for big bands) USES RHYTHMS IN EACH CONTRAPUNTAL VOICE WHICH, WHEN COMBINED, RESULT IN ONE cohesive, natural rhythm.

- [illegible]

100



—

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- 52) The check shows where the **THIRD RHYTHM** has actually added a new attack to the composite rhythm of the first two lines.
- 53) Again, I can sing the resultant rhythm and **KNOW** what all three lines will sound like rhythmically when played.

### MELODIC CONSIDERATIONS

- 54) The **TYPE** of composition plays an important role in determining the actual melodic lines. If the composition is based on the blues or modal scales, you can write a much freer style of counterpoint against the melody.
- 55) If the composition is based on definite key areas (most of which are modulatory), there is much more responsibility for harmonic definition, which we will call **HARMONIC IMPLICATIONS**.
- 56) In any melodic situation, sequential (strict or diatonic) and fragmentary imitation of either voice adds continuity as well as a world of possibilities.
- 57) Imitation can be the most obvious starting point, melodically, for your voices. Use of an inversion or retrograde position opens up more ideas. Contrary motion directional melodies are often very interesting.

Ex. #314



Ex. #315

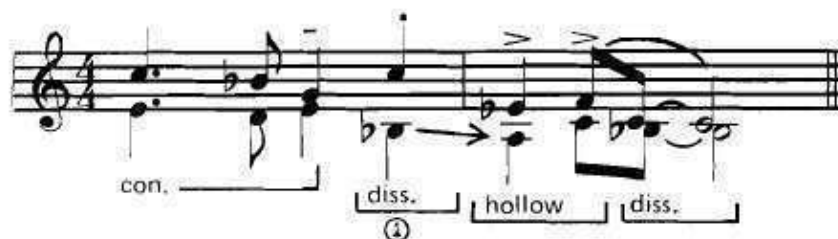


### BLUES AND MODAL COUNTERPOINT

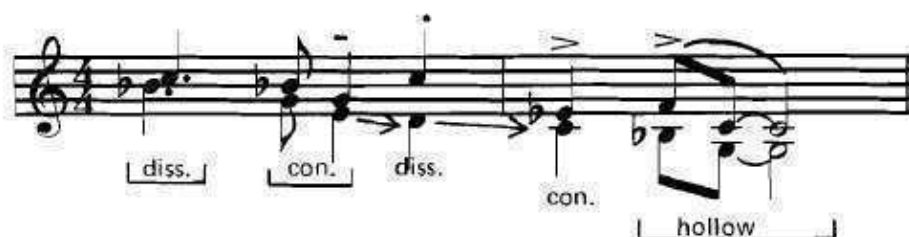
- 58) In this situation your main consideration is the **INTERVAL RELATIONSHIP** between the two lines (the **HARMONIC RELATIONSHIP IS RELATIVELY UNIMPORTANT**).

- 59) If the rhythm of the two lines is **CONCERTED** (i.e., the same), you will want to be aware of the vertical interval formed by any two melodies played at the same time. 3rds, 10ths and 6ths produce consonant intervals. 4ths and 5ths produce a more hollow effect. 2nds, 9ths and 7ths produce dissonant intervals.
- 60) The following examples illustrate these points and their effect. SC

Ex. #316

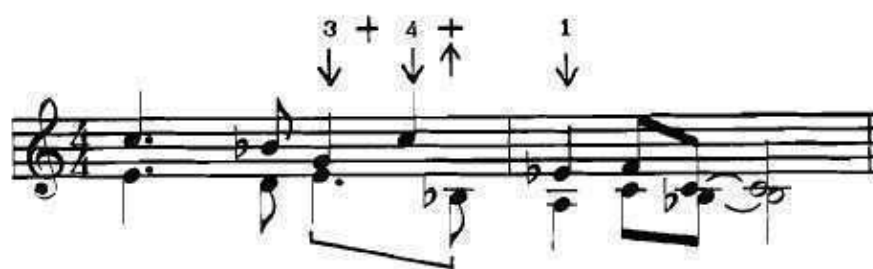


Ex. #317

SC

- 61) If the rhythms are not concerted, dissonant intervals can be softened by staggering the entrance of the 2nd voice rhythmically.

Ex. #318

SC

- 62) The bracket indicates the rhythmic adjustment, softening the 9th interval dissonance at Point 1 of Example 316.
- 63) The arrows in Examples 316 and 317 also point out that a dissonant interval is, in many cases, better prepared if you move into and/or out of the dissonance by a step (whole or half).
- 64) Here are some procedural suggestions for writing two part contrapuntal melodies based, for example, on a Mixolydian Mode:
- If the composition you are arranging is based on a Mixolydian scale or mode, you can make it the thematic material for the contrapuntal voice, or work out your own counter melody from the scale.

- b) Get the rhythmic phrasing as natural and as representative of the feeling of this section as you can.
  - c) In approaching the counter melody or second voice, first determine its rhythmic character. If the melody or first voice is very busy, keep the second voice rhythmically simple.
  - d) The rhythmic nature of the second voice may be increased almost in direct proportion to the degree of simplicity of the melody.
- 65) The point is that the second line SHOULD CONTRAST with the melody rhythmically.
- 66) Let's go back and use our rhythm in Example 309. It is the rhythm of the melody from my chart PAT. PENDING. Below that is the rhythm for the second voice. Notice that when one moves, the other rhythm is sustained or tacit.

## Ex. #319



- 67) At this point I have checked my composite rhythms, and I KNOW how they will play against each other. My next step is to add the melody to the rhythm of the second voice. If my original melody is based on the Eb Mixolydian Mode (see Example 320), I will consider that the base from which to find an interesting counter melody.

## Ex. #320

SC



- 68) My orchestration of the two lines can be any number of possibilities as discussed in Chapter Twelve.
- 69) Because both melodic lines are based on the Mixolydian mode, my main consideration is the vertical interval relationship between the two lines, and my own musical acceptance or non-acceptance of the intervals formed.

## HARMONIC IMPLICATIONS

- 70) When a composition is based on definite key areas using modulatory IIm7-V7-I chords, I have a different set of considerations to work with. First of all, the melody, or my own melody based on the chords of the composition will reflect the harmonic character of the music. When I write the second voice, I must also reinforce the harmonic character. This does not affect the rhythmical point of view as previously mentioned, but the interval relationship is complicated by the fact that I MUST ALSO DEFINE THE HARMONIC FEELING IN RELATION TO THE FIRST VOICE.
- 71) **WHAT DEFINES A CHORD?** The most critical chord tones are the 3rd, then the 7th. However, any basic chord tone is quite strong, so now we include the root and 5th.
- 72) The key to this is that in working against a given melody note in the first voice I have a choice of notes in the immediate chord. Each of these choices form an interval to the given melody note. I must evaluate my intuitive melodic ideas against the:
1. INTERVAL FORMED and its
  2. CHORDAL FUNCTION.
- 73) If the **INTERVAL FORMED** is not attractive or the **CHORDAL RELATIONSHIP** is so non-definitive that my ear is bothered, I must then adjust my melodic idea by considering another chord tone available from the immediate chord symbol.
- 74) I will now work through this process, using the melody from DILL PICKLES.

Ex. #321

SC

### DILL PICKLES

#### BRITE JAZZ WALTZ

" Dill Pickles "

*Brite Jazz Waltz*

TACIT IX

Cont. on Next Page

# 75) RHYTHMIC AND MELODIC CONSIDERATIONS:

The melody is played once alone. The second voice enters on the repeat of the first voice (for a building effect). Therefore, I waited for the second measure to make the entrance of the new second voice. (See Point 1.) This helps establish the melody, and makes the contrapuntal effect more obvious. Other entrances and motion occur when the first voice is tacit or sustained (Points 3, 5, 6, 7).

76) Notice that the tones in the second voice for the most part are basic chord tones from each immediate chord (Points 1, 2, 3, 4). Also, in using chord tones, many 3rds and 7ths of a chord are used for definitive purposes (see Points 1, 3, 5, 7, 8).

77) The first Passing tones involved in the second voice occur at Points 9 and 10.

78) Some doubling of the first melody occurs where needed to make a more melodic second voice. (See Points 1, 3, 5, 6, 9, 11, 12.)

79) The second voice becomes more constant the last six measures, creating a build and more of a climactic effect.

80) These approaches are meant to give you a starting point in working out contrapuntal ideas, and a foundation that you can use to DRAW CONCLUSIONS ON YOUR OWN, relative TO YOUR OWN PROBLEMS IN YOUR OWN SITUATIONS. They are purposely generalized for simplicity.

Always approach rhythmic patterns and melodic ideas intuitively, THEN RELATE YOUR SKETCH TO THE CONSIDERATIONS MENTIONED.



## SECTION III — HARMONIC CONSIDERATIONS

### Chapter 7: Voiceleading

- 1) This section will explore and define various areas of harmonic manipulation that are basic prerequisites for the arranger. An effective degree of facility is necessary in all of these areas in order to find the best harmonic solution in any situation.

#### VOICELEADING

- 2) Voiceleading is the process of horizontally moving a tone or voice in a vertical chordal structure smoothly to a tone in each following chord structure. The melody (or top voice) requires no special handling because our ear is naturally aware of the exposed voice. A logical melody, however, does not automatically imply that each of the inner voices will voicelead smoothly. In most cases, good voiceleading is always preferred.
- 3) Smooth voiceleading in the inner voices produces a more "natural," easily played part that enables a group of instruments to blend and phrase better, as well as to play more in tune.
- 4) The importance of voiceleading is supplemented by the DENSITY CONCEPT discussed in Section Four. In many cases, the search for an interesting voiceleading from chord to chord will dictate different levels of DENSITY. This is particularly true when the BOTTOM VOICE IS WORKED OUT FIRST, IN RELATION TO THE MELODY.

#### COMMON TONES

- 5) When two chord structures contain an identical tone, it is referred to as a COMMON TONE, or tone common to both structures.

Ex. #322



- 6) If this commontone is retained IN THE SAME VOICE, THE EFFECT OF THE SMOOTHEST POSSIBLE VOICELEADING IS PRODUCED.
- 7) Example 323 illustrates a chord progression containing the common tone "A." (In this, and subsequent examples, the particular note that is common to both chords is shown with a black notehead.)
- 8) In this example, the "A" functions in the TOP VOICE as the 3rd of the Fma7th chord and also as the ROOT of the A7(b5) chord.

- 9) BECAUSE THE TONE THAT IS COMMON OCCURS IN THE TOP VOICE OF THE FIRST CHORD (the F<sup>ma</sup>7th), IT IS RETAINED AS THE TOP VOICE OF THE SECOND CHORD (the A7(b5)). EACH OF THE REMAINING VOICES OF THE FIRST CHORD MOVE TO THE CLOSEST POSSIBLE TONE IN THE SECOND CHORD (i.e., the F to G; E to Eb; C to C#).
- 10) Adherence to these principles then produces the smoothness that is the result of effective voiceleading. Example 324 illustrates the same process applied to the same chords IN OPEN POSITION (over an octave from top to bottom).

Ex. #323

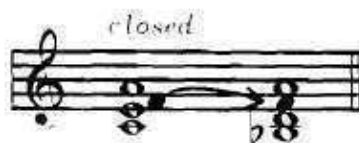


Ex. #324



- 11) Examples 325 to 327 show how this same reasoning would apply to closed and open voicings where:
- THE COMMON TONE OCCURS IN THE 2ND VOICE (Example 325).
  - THE COMMON TONE OCCURS IN THE 3RD VOICE (Example 326).
  - THE COMMON TONE OCCURS IN THE 4TH VOICE (Example 327).

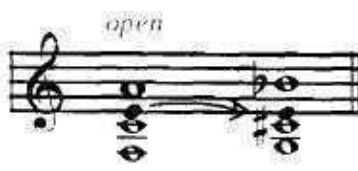
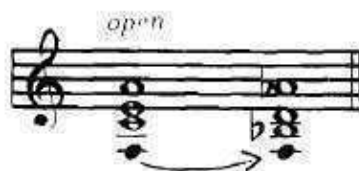
Ex. #325



Ex. #326



Ex. #327





- 12) The following examples illustrate the application of voiceleading in situations where two and three tones function as common tones. These examples show the chords in both closed and open positions.

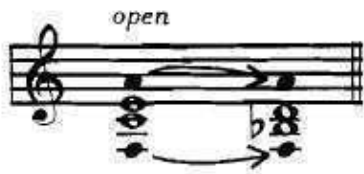
Ex. #328



Ex. #329



Ex. #330

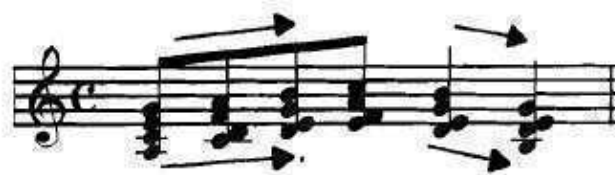


- 13) THIS SAME PRINCIPLE OF THE COMMON TONE APPLIES TO TWO TO EIGHT PART HARMONY.

### PARALLEL MOTION

- 14) **PARALLEL MOTION** describes the consistent directional motion of all voices involved. The most used and practical application of parallel motion is when **BLOCK** open or closed voicings are used. (See Chapter 15, Paragraphs 4 to 24.) As this chapter explains, the principle of Block voicing maintains **ALL THE INNER VOICES MOVING IN THE SAME DIRECTION AS THE MELODY**, thus creating a consistent parallel motion with the melody.

Ex. #331



SC

- 15) Parallel Motion is then any voiceleading where all the voices involved move in the same direction.



CONTRARY MOTION

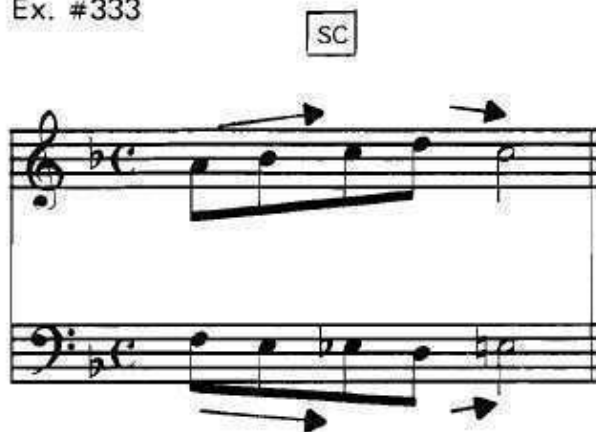
- 16) **CONTRARY MOTION** also describes a directional usage of tones. The direction of the melody (ascending or descending) is the basis for **CONTRARY MOTION**. If the melody ascends, the other voice then moves **IN THE OPPOSITE DIRECTION**, and vice versa.

Ex. #332

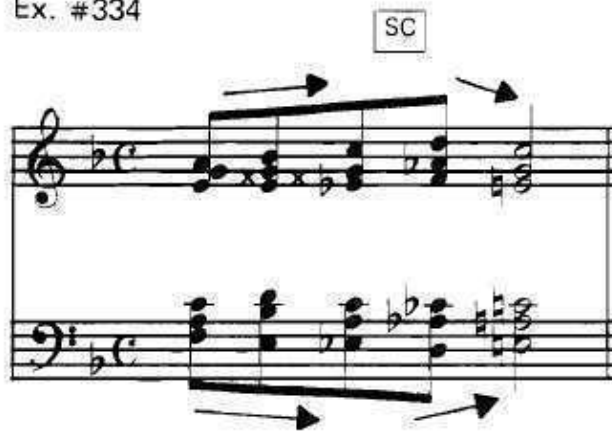



- 17) This approach can be seen as a very interesting technique in counterpointal and two part writing. It can also be applied to three part on through eight part harmony by utilizing the **CONTRARY MOTION** to the melody and the **BOTTOM VOICE**.
- 18) The subsequent **INNER VOICES** are made up of the remaining chord tones of each chord structure **OUTLINED** by the melody and bottom voice.

Ex. #333



Ex. #334



- 19) The particular harmonizational approach shown in these examples is explained later in Chapter 8 on Passing chords. The important consideration here is the effect of the contrary motion between the ascending melody and descending bottom voice.
- 20) The X's shown in Example 334 represent a typical situation where **REPEATED NOTES ARE FORMED IN THE INNER VOICES**. Repeated notes are more difficult to effectively phrase when playing one of the inner voices, and should be avoided whenever possible. This can be done by **CROSSING VOICES** when the original sketch (as shown in Example 334) is finally orchestrated and each voice extracted and placed on the score.
- 21) The "X" indicates this **CROSS VOICING** and literally would mean , consequently, the second voice in Example 334 would be:

Ex. #335



The third voice would then become:

Ex. #336



### 7 – 3 VOICELEADING

- 22) The 7 – 3 voiceleading is a very effective approach for open sax or combo background voicings where circle of 5th and parallel progressions in particular are involved.

### 7 – 3 as MELODY

- 23) This approach is predicated on assigning either the 3rd or 7th (the definitive chord tones) of a chord TO THE TOP TWO OR THREE VOICES. The choice of the 3rd or 7th as a top voice is dependent on the best register of the instruments being used.
- 24) If the 3rd has been chosen as the top voice, the 7th becomes the 2nd voice. Below that, the 3rd can be doubled for the 3rd voice. The 4th voice would usually be the root of the chord. (See Example 337.)
- 25) If the 7th of the chord has been chosen as the top voice, the 3rd becomes the 2nd voice. Below that, the 7th can be doubled for the 3rd voice. The 4th voice would remain the root. (See Example 338.)

Ex. #337



Ex. #338



- 26) Because of the sequential character of the Circle of 5th progressions (using any combination of minor 7th, dominant 7th or major 7th chords), the 3rd and 7th will always alternate in each voice as it voiceleads through the progression. The rhythmic interpretation, of course, is arbitrary.

## Ex. #339

SC

Cma7 Fma7 Bbma7 Ebma7 Abma7 Dbma7 Gma7 Cma7

- 27) In parallel progressions (roots moving by step), the 3rd and 7th will remain constant in each voice.

## Ex. #340

SC

Fma7 Gmi7 Ami7 Abmi7 Gmi7 Gbma7 Fma7

7 - 3 AS INNER VOICES

- 28) The same procedure as outlined above for using the 3rd or 7th on Circle of 5th and Parallel progressions can be applied, using the 3rd and 7th as inner voices, and a FREE MELODY LINE AS THE TOP VOICE. This melody line is also free in the sense that rhythmically it can be different than the supporting voicings. (For free melody, or free lead, see Basic Technique No. 16, page 373.)

## Ex. #341

FREE MELODY

SC

Cmi7 F7 Bbmi7 Eb7

- 29) In this version, the 3rd and 7th become the 2nd and 3rd voices with the root remaining the 4th or bottom voice.

### ADDITION OF OTHER CHORD TONES

- 30) Within the framework discussed in Paragraphs 28 and 29 of this chapter, additional chord tones such as the 5th and 9th can be used AS AN ADDITIONAL 4th or 5th VOICE.

Ex. #342

3rd or 7th in melody:

Ex. #343

3rd and 7th as inner voice  
PLUS additional tones (5th, 9th)

NOTE: Also see Chapter 16 – Open Five Part Voicings



## SECTION III — HARMONIC CONSIDERATIONS

### Chapter 8: Passing Chords

- 1) Passing chords are those chords used to harmonize melody notes that:
  - a) Function as tension tones (9th, 11th, 13th) of the chord.
  - b) Are out of chord tones.
  - c) Occur on weak beats of the measure.
  - d) Occur on the UP BEATS of a measure.

The effect and purpose of passing chords is to:

- a) Harmonize those melody notes that are tension tones of the chord.
  - b) Harmonize melody notes that are UPPER or LOWER NEIGHBOR TONES TO THE CHORD.
  - c) Provide relief from repeating the same chord.
  - d) Create the feeling of motion in the inner voices.
- 2) There are different approaches to choosing a passing chord. As we examine these approaches we will relate each to its characteristic style.

#### SUBSTITUTION NOTES

- 3) The first consideration is, of course, whether to utilize passing chords at all. In some instances of any style, but particularly the more commercial hotel and dance band styles, it is more in keeping NOT TO INTRODUCE THE EFFECT OF NEW CHORDS, which is the basis of passing chords. It is also typical of the less sophisticated pop/rock styles to use few passing chords.
- 4) If the choice is NOT TO INTRODUCE PASSING CHORDS, we would then employ SUBSTITUTION NOTES. This means we will retain the original chord and consider the melody note to be SOME FUNCTION OF THE ORIGINAL CHORD: This, then, is IMPLYING 4, 5, 6 or 7 part harmony with three parts; IMPLYING 5, 6 or 7 part harmony with four parts; IMPLYING 6 or 7 part harmony with five parts; IMPLYING 7 part harmony with six parts or using all seven possible tones of a chord structure.
- 5) The specific explanation of SUBSTITUTION NOTES and its application is covered fully in Section Four — Density. Included are tables showing possible handlings of all melodic functions. (Refer to Section IV, Pages 18 and 21.)

#### PASSING CHORD APPROACHES

- 6) The sources and possibilities of passing chords should be thought of in two ways. The first and most conventional way is the approach that can be used when the BASIC VOICINGS are determined DOWN FROM THE MELODY NOTE. This would specifically cover such voicings as BLOCK (closed or open), MELODIC COUPLINGS and DIATONIC CLUSTERS.
- 7) Melodic Couplings are explained in Basic Technique No. 4, Chapter 13 — Two Part Density in Chapter 13 — Block (open and closed) voicings are explained in Chapter 15 and Diatonic Clusters are discussed in Chapters 14 and 17.

### THE DIMINISHED 7TH PASSING CHORD

- 8) Of all the sources of passing chords, the Diminished 7th chord is probably the most conventional. Consequently, it is characteristically used in the following styles of music: swing, commercial, blues, dixie and the more conventional big band styles.
- 9) The strength and flexibility of this passing chord source is in the character of the Diminished 7th chord itself. This chord has a **SYMMETRIC CONSTRUCTION** (a minor third interval between each chord tone) which, in major keys, prevents it from having a diatonic relationship with the key area. Consequently the chord has a neutral character and does not reflect the major scale. Because of this, each diminished 7th chord has the effect of wanting to resolve to the following chord.
- 10) The source of the Diminished 7th chord is **THE MELODY NOTE ITSELF**. If the melody note is "A," the **ROOT OF THE DIMINISHED 7th CHORD IS "A"** (i.e., an "A" Diminished 7th chord). If the melody note is "Eb," the **ROOT OF THE DIMINISHED 7TH CHORD IS "Eb"** (i.e., an "Eb" Diminished 7th chord).
- 11) The following Example 344 shows a melody that could use passing chords. The "X" above a melody note indicates where a tension note occurs in the melody in relation to the chord symbol.

Ex. #344



- 12) The next examples show the application of the Diminished 7th chord as a Passing chord, in closed (Example 345) and open (Example 346) voicings. In each case, the melody note involved **BECOMES THE ROOT OF THE DIMINISHED 7th chord** I have used.

Ex. #345

## Ex. #346

The musical notation for Example #346 is written on two staves in B-flat major (two flats). The treble staff contains four chords: A-flat 6, X, X, and D-flat 9. The bass staff contains two chords: B-flat 7 and D-flat 7. The 'X' marks are placed above the treble staff, indicating the diatonic passing chords between the main chords.

DIATONIC PASSING CHORDS

- 13) Diatonic Passing chords are on a level with Dim. 7th Passing chords in terms of great practicality and consistent effect. Be very clear in your own mind on the relative differences between using the Dim. 7th Passing chord and the Diatonic Passing chord. Dim. 7th Passing chords always introduce ACCIDENTALS (because of the diminished chord spelling), creating a CHROMATIC EFFECT. Diatonic Passing chords, however, stay more DIATONIC TO A BASIC KEY AREA, producing a smoother, flowing effect in a tonal sense.
- 14) Diatonic Passing chords are more versatile than the Dim. 7th Passing chord. Along with being characteristic of the Swing, Commercial, Blues and conventional big band styles, they are a very suitable approach to modal compositions.
- 15) The SOURCES of Diatonic Passing chords are found in the BASIC DEFINITIVE CHORDS (or cadence) IN EACH MAJOR OR MINOR KEY AREA (i.e., in C major, the definitive chords or cadence would be the Dmi 7, G7 and Cmaj7 or 6th chords).
- 16) Because these chords DEFINE a KEY FEELING, the restricting of the source of the Passing chord to ONLY THESE CHORDS, CONSTANTLY REINFORCES THE KEY FEELING. This would be in contrast to the introduction of tones, CHROMATIC TO THE KEY AREA.


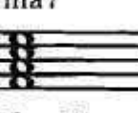

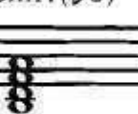

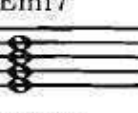


HOW TO APPLY THE DIATONIC PASSING CHORDS

- 17) The ORIGINAL CHORD in your lead sheet or sheet music will usually be a form of the IImi7, V7 or I major. When IImi7 is the ORIGINAL CHORD, a form of the V7 or I major chord can be used as the diatonic Passing chord.













- 18) Approaching the  $\text{II mi7}$ ,  $\text{V7}$  and  $\text{Imaj7}$  or 6th from a basis of PLURALITY, the following diatonic chords can be thought of as possible alternates to these basic chords, and as functioning IN THE SAME WAY.

Ex. #347

Basic Definitive Chords In Major	Diatonic Chords used as alternates
$\text{Dmi9}$ 	$\text{Fma7}$ 
$\text{II mi9} \longrightarrow$	$\text{IV ma7}$
$\text{G9}$ 	$\text{Bmi7(b5)}$ 
$\text{V9} \longrightarrow$	$\text{VII mi7(b5)}$
$\text{Cma9}$ 	$\text{Emi7}$ 
$\text{Ima9} \longrightarrow$	$\text{III mi7}$
$\text{C6}$ 	$\text{Ami7}$ 
$\text{I6} \longrightarrow$	$\text{VI mi7}$

Ex. #348

Basic Definitive Chords In Minor	Diatonic Chords used as alternates
$\text{Dmi7(b5)}$ 	$\text{Fmi6}$ 
$\text{II mi7(b5)} \longrightarrow$	$\text{IV mi6}$
$\text{G7(b9)}$ 	$\text{B}^{\circ 7}$ 
$\text{V7(b9)} \longrightarrow$	$\text{VII}^{\circ 7}$
$\text{Cmi ma9}$ 	$\text{Eb ma7(+5)}$ 
$\text{Imi ma9} \longrightarrow$	$\text{III ma7(+5)}$
$\text{Cmi6}$ 	$\text{Ami7(b5)}$ 
$\text{Imi6} \longrightarrow$	$\text{VI mi7(b5)}$
$\text{Cmi9}$ 	$\text{Eb ma7}$ 
$\text{Imi9} \longrightarrow$	$\text{III ma7}$

#### APPLYING DIATONIC PASSING CHORDS TO AN ORIGINAL $\text{II mi7}$ CHORD

- 19) When the  $\text{II mi7}$  is the ORIGINAL CHORD, a form of the  $\text{V7}$  (or  $\text{VII mi7 [b5]}$ , see Example 347) or  $\text{Imaj7}$ ,  $\text{I6}$  (or  $\text{III mi7}$ ,  $\text{VI mi7}$ , see Example 347) can be used as the Passing chord.



- 20) The following example from "CHICKEN LITTLE" shows this application to the Gmi7 (IIImi7) using the Ami7 (IIIImi7) as the Diatonic Passing chord (see Example 349). The IIIImi7 Passing chord therefore FUNCTIONS AS A FORM OF THE I Maj9, and is ONE POSSIBILITY AS A PASSING CHORD SOURCE WHEN THE ORIGINAL CHORD IS A IIImi7. The remaining possibilities would be:

KEY OF F

FMa7 (IMaj9)

F6 (I6)

C7 (V7)

Emi7(b5) (VIIImi7[b5])

Dmi7 (VIImi7)

## Ex. #349

4 Trpts. Bb7(6) Ami9 Gmi9 Ami9 Gmi9 Ami9 Gmi7

4 Trbs. X X X

Gmi7

APPLYING DIATONIC PASSING CHORDS TO AN ORIGINAL V7 CHORD

- 21) When the V7 is the ORIGINAL CHORD, a form of the IMaj7, I6 (or IIImi7, VIImi7) or IIImi7 (or IVMaj7) can be used as the Passing chord. The following example shows this application to the F7(V7) using first the Gmi7(VIImi7) then the Cmi7(IIImi7) as the Diatonic Passing chords (refer to Example 350). The VIImi7(Gmi7) Passing chord therefore, FUNCTIONS AS AN ALTERNATE TO THE I6(Bb6). The Cmi7 Passing chord FUNCTIONS AS THE IIImi7.
- 22) Both are possible Diatonic Passing chord sources when the original chord is a V7. The remaining possibilities would be:

KEY OF Bb

BbMa7 (IMaj7)

Bb6 (I6)

Dmi7 (IIIImi7)

Eb Maj7 (IVMaj7)

## Ex. #350

4 Trpts. F7 X X

3 Trbs. Gmi7 Cmi7

APPLYING DIATONIC PASSING CHORDS TO AN ORIGINAL I CHORD

- 23) When the IMaj7 or I6 is the original chord, a form of the IIImi7 (or IVmaj7, see Example 347) or V7 (or VIIImi7[b5], see Example 347) can be used as the Passing chord.
- 24) The following example from DAY IN, DAY OUT shows this application to the Abmaj9 (Imaj9) using the Bbm7(IIImi7) as a DIATONIC PASSING CHORD (see Example 351). The IIImi7 (Bbm7) Passing chord, therefore, is functioning as a IIImi7 with no alternate chord being used.
- 25) This is one possible Diatonic Passing chord source when the original chord is a form of I major. The remaining possibilities would be:

KEY OF Ab

Dbmaj7 (IVmaj7)

Eb9 (V9)

Gmi7(b5) (VIIImi7[b5])

## Ex. #351

The musical notation for Example 351 is written on two staves, Treble and Bass clef, in the key of Ab (three flats). The time signature is common time (C). The top staff features a melodic line with a slur over a sequence of notes, with an 'Abmaj9' label above it. The bottom staff, labeled 'Brass', shows a harmonic accompaniment. A specific chord in the brass part is marked with an 'X' and labeled 'Bbm7'.

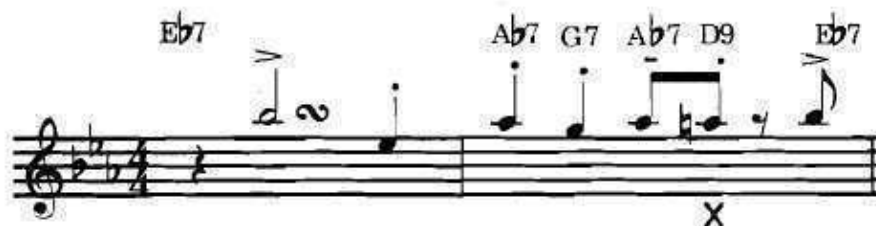
CONCLUSIONS

- 26) The same reasoning and available possibilities apply to the IIImi7(b5), V7(b9) and I minor chords in MINOR KEY AREAS. Review Example 348 to clarify the alternate chord possibilities. Reference Points X, Y and Z in Example 348 indicate the three DEFINITIVE CHORDS AND ALTERNATES for the three different MINOR SCALES: Point X, Harmonic Minor; Point Y, Melodic Minor and Point Z, Natural or Normal Minor.
- 27) As I have explained, the understanding of the flexibility inherent in Diatonic Passing chords provides you with a number of possible Passing chord sources in any circumstance. Because of all of these possible Passing chords in a given situation, it is best to TRY ALL THE CHOICES, selecting the one which to YOUR ear FLOWS the smoothest throughout the OVERALL PHRASE.
- 28) After gaining some experience in using this approach, you will find your facility will speed up as well as your familiarity with the individual sound of the various possibilities.

### CHROMATIC APPROACH AND PASSING CHORDS

- 29) Many times a more basic melodic chord tone will be approached by a neighboring tone a half or whole step above or below.

Ex. #352



- 30) Moving in half or whole steps into the basic melodic chord tone, these tones MAY OR MAY NOT actually be melodic passing tones, functioning instead as diatonic or chromatic neighboring tones.
- 31) In either instance, two sources of harmonization are possible. The first is that of a CHROMATIC APPROACH CHORD.
- 32) The thinking here is that the chromatic Passing or approach chord can be the identical chord type as THE CHORD IT IS MOVING INTO. Example 352 shows an "A" melody note moving chromatically into a "Bb" melody note. (The 5th of the Eb9 chord.)
- 33) Because of the half step movement of the A to Bb, and the use of the Eb9 chord for the Bb melody note, I can harmonize the "A" melody note as the 5th of a D9 chord. Thus, both the melody note (A) and its chord (D9) are approaching the Eb9 chromatically and as a dominant 9th chord form.
- 34) This approach would hold true if the chord we are moving into is a major or minor 7 chord (see Examples 353 and 354).

Ex. #353



Ex. #354



### CHROMATIC AND DOMINANT APPROACH CHORDS

- 35) You can arbitrarily choose to use a dominant approach chord to move into ANY TYPE of basic chord, such as min7(b5), min6, dim7th, etc.

#### Ex. #355

Dmi7 F9 Eri11(b5)

The example shows a short musical phrase in C major on a grand staff. The first measure contains a D minor 7th chord (Dmi7). The second measure contains an F9 chord. The third measure contains an E minor 11th chord with a flat 5th (Eri11(b5)). A large 'X' is placed below the staff between the first and second measures, indicating a chromatic approach.

- 36) It is also possible to move chromatically into a chord using a dominant (and occasionally a major 7th) chord when the melody note itself is NOT APPROACHING by a half step (see Example 355). Of course, the specific melody note MUST HARMONIZE REALISTICALLY with your dominant approach chord. (See Tables 12 and 13.)
- 37) It is possible to move into a chord with a dominant chord built from the root a perfect 5th or perfect 4th above the root of the chord you are approaching. This is also dependent on that chord's melody note harmonizing effectively with the dominant approach chord.

#### Ex. #356

FIVE SAXES E $\flat$ 7 B $\flat$ 13 E $\flat$ 13 A $\flat$ 7 E $\flat$ 9 E $\flat$ 13 E $\flat$ 9 A $\flat$ 13 E $\flat$ 13 A $\flat$ 9 E $\flat$ 9 A13 A $\flat$ 9

The example shows a musical phrase for five saxophones in C major, 4/4 time. The sequence of chords is: E $\flat$ 7, B $\flat$ 13, E $\flat$ 13, A $\flat$ 7, E $\flat$ 9, E $\flat$ 13, E $\flat$ 9, A $\flat$ 13, E $\flat$ 13, A $\flat$ 9, E $\flat$ 9, A13, A $\flat$ 9. The notation includes dynamic markings (mf), articulation (accents), and phrasing slurs. A large 'X' is placed below the staff between the first and second measures, indicating a chromatic approach.

- 38) This approach is characteristic of jazz and blues styles.

- 39) In all these cases where you are adding a dominant approach chord and must harmonize it correctly with the melody note, you can **ALTER THE DOMINANT** approach chord to handle the melody note (i.e., using a Dom7(+9) because the melody note functions as a +9 to the root).

**Ex. #357**

**FIVE SAXES**

Gmi9    Gb7(+9) Fma9

**CONCLUSIONS**

- 40) We have discussed several different sources of passing and approach chords. The specific differences between these contrasting sources enable you to have a wide choice in any situation. Better still, you can **CONTROL** the type of Passing chord, thereby achieving the most effective Passing chord for a particular style of music.
- 41) All the Passing chord possibilities covered apply to both open and closed chord voicings.

**PASSING CHORDS FROM BASS LINES**

- 42) A more sophisticated approach to Passing chords involves actually reharmonizing from the basic harmony of a composition. Because of this reharmonizational effect, the application of these techniques is much more limited in use.
- 43) Reharmonization always carries an important responsibility, that of not abusing the effect by overdoing it. This technique also produces a new chord for each melody note which adds to the total impact, but again, when overdone produces an over-arranged, busy arrangement.
- 44) The best applications of this technique are when (1) the tempo is slow to moderately fast and (2) when the **CONTOUR** of the melody or background melody has an interesting shape. For example, a directional shape (ascending or descending).
- 45) The reason **WHY** this approach works is the careful adherence to **REINFORCING THE BASIC KEY AREA OR TONALITY**. To guarantee this attention to the tonal obligation, always follow precisely the chord choices outlined below in Table 11. These specific chords are presented because of their close plurality and relationship with the diatonic scales.
- 46) I have already explained the relationship between diatonic chords built from each degree of the major scale (review Examples 347 and 348), therefore this application to a specific situation is first predicated on identifying whether the basic chord symbol functions as a IImi7, V7 or I chord.

## Ex. #358

## TIME AND TIME AGAIN



- 47) Once this has been established it is necessary to indicate those beats of the measure where THESE BASIC CHORDS OCCUR. The X's in Example 359 pinpoint the beat where each chord change occurs.

## Ex. #359



This will usually be the 1st and 3rd beats of a measure.

- 48) The important implication of this is that the X's shown in Example 359 indicate WHERE THE EAR EXPECTS TO HEAR THE TONALITY OF THE KEY AREA DEFINED.
- 49) Each of these X's functions as a LANDING POINT. In other words, I may introduce chords OTHER than at those points shown in Example 359, as long as I adhere to these basic chords (or their plural alternates; review Examples 347 and 348) on the beats where the landing points (on X's) are indicated.
- 50) With this theoretical foundation, the actual technique concerns itself with creating a bass line in relation to the melody that leads smoothly (by half step, whole step or Perfect 5th) into a landing point (indicated by an X in Example 359).
- 51) This is best approached by working BACKWARDS from the landing point. The most interesting effects are those utilizing a contrary motion (or directional) relationship between the melody and bass line. However, parallel or combinations of directional and parallel relationships are entirely valid.
- 52) Your own musical taste and sensitivity PLUS the concept of the technique are the prerequisites for determining the selection of notes in the bass line. There will always be a number of different ways to handle a situation.

- 53) Examples 360 and 361 show examples of "TIME AND TIME AGAIN" with bass lines produced with this approach.

Ex. #360

Example 360 shows a musical score with two staves (treble and bass clef) in common time. The melody is in the treble staff, and the bass line is in the bass staff. The chords are Dmi7, G7, and Cma7. The bass line stays with the original chords for the first two measures, then a new bass line starts in the third measure. An arrow shows the directional relationship of melody and bass line. A dashed line indicates the new bass line starts here. A note 'X' indicates each note of the new bass line is worked out backwards from landing point X.

Dmi7                      G7                      Cma7

arrow shows directional relationship of melody and bass line

bass line stays with original chords

new bass line starts here

X = Each note of new bass line is worked out backwards from landing point X

Ex. #361

Example 361 shows a musical score with two staves (treble and bass clef) in common time. The melody is in the treble staff, and the bass line is in the bass staff. The chords are Dmi7, G7, and Cma7. The bass line is more active than in Example 360, with more notes. An arrow shows the directional relationship of melody and bass line. A dashed line indicates the new bass lines. A note 'X' indicates each note of the new bass line is worked out backwards from these landing points--X.

Dmi7                      G7                      Cma7

arrow shows directional relationship of melody and bass line

X ← ----- X ← ----- X = Each note of new bass line are worked out backwards from these landing points--X

new bass lines

- 54) The bass lines shown in Examples 360 and 361 illustrate:

- A sparse usage of a "NEW BASS LINE" in Example 360.
- A more total usage of a new bass line in Example 361.
- The arrows (between staves) indicate that the melody-bass line directional relationships can be any combination of contrary motion, parallel or directional, against a common or repeated tone.



- d) One consistent factor is that the last bass note leading into each landing point MOVES BY A HALF OR WHOLE STEP, or PERFECT 5TH.
- e) These exposed melody-bass line sketches enable you to be completely aware of the directional relationship of the melody and bass line and the amount of new bass line used in relationship to an entire phrase.
- f) The bass line moves rhythmically WITH the rhythm of the melody, producing a concerted, new chord for melody note effect.

### HARMONIZATION OF THE NEW BASS LINE

- 55) Once the bass line has been sketched in, the next process is to determine the harmonization of the melody based on the bass line.

**TABLE 11**

In C Major		I	$\sharp I$	II	$bIII$	III	IV	$\sharp IV$	I/V	$bVI$	VI	$bVII$	VII
		C	$C\sharp$	D	$E\flat$	E	F	$F\sharp$	G	$A\flat$	A	$B\flat$	B
			mi7( $b5$ )		maj		/3		mi7( $b5$ )	Cma7/5	A $\flat$ maj	B $\flat$ maj	
In A Minor		C	$C\sharp$	D	$E\flat$	E	F	$F\sharp$	G	$A\flat$	A	$B\flat$	B
	$bIII$	III	IV	$bV$	V	$bVI$	VI	$bVII$	VII	I	$bII$	II	

- 56) To understand and apply Table 11, relate these points to the table:
- a) The whole note bass notes represent the diatonic major scale tones. The black note heads represent the chromatic tones of a major scale.
  - b) The diatonic harmonization conforms to previous references to DIATONIC CHORDS, with the exception of the V bass tone. In this case, we AVOID the use of any dominant chord in Table 11. The dominant is avoided because the character of the dominant chord has such an OBVIOUS tonal effect.
  - c) Each chromatic bass tone can be harmonized with a diminished 7th chord.
  - d) The  $\sharp I$  and  $\sharp IV$  bass tones can also be harmonized by a minor 7( $b5$ ) chord.
  - e) The  $bIII$ ,  $bVI$ , and  $bVII$  bass tones can also be harmonized with any form of a major chord.
- 57) Only these harmonizations should be used within the flexibility of standard extensions and alterations consistent with each chord type.
- 58) The working out of the specific chord harmonization is dependent on the RELATIONSHIP OF THE MELODY NOTE TO ITS BASS TONE AND CHORD TYPE, as dictated by Table 11.
- 59) If a melody note/chord relationship does not work, try adjusting the bass tone by a half step (in either direction), resulting in a new chord harmonization that should work better with the melody note.



- 60) Obviously, at this point you have determined a bass line, and a chord symbol, harmonizing the melody note. The particular VOICING OR DENSITY YOU FINALLY ARRIVE AT SHOULD NOT ENTER INTO YOUR JUDGMENT AND CONSIDERATION NOW. You have, in reality, simply adjusted your "lead sheet" to the extent that you have:
- Finalized your passing chords.
  - Established a bass line in conjunction with the melody.
- 61) When you actually VOICE your chord, any density, and any voicing approach can be used (block, triads, open, etc.).
- 62) Examples 362 and 363 follow the harmonization possibilities as shown in Table 11. Check Examples 362 and 363 against the melody/bass lines shown in Examples 360 and 361. Trace the process and relate my conclusions to these earlier examples.

## Ex. #362

SC

Example 362 shows a melody and bass line in 4/4 time. The melody is in treble clef, and the bass line is in bass clef. The key signature has one flat (Bb). The melody consists of a half note D4, a quarter note E4, a quarter note F4, a quarter note G4, a quarter note A4, a quarter note Bb4, a quarter note C5, and a half note Bb4. The bass line consists of a half note Bb3, a quarter note A3, a quarter note G3, a quarter note F3, a quarter note E3, a quarter note D3, a quarter note C3, and a half note Bb3. The chord symbols are: Dmi7 (above the first measure), G7 (above the second measure), and Cma7 (above the third measure). The bass line has chord symbols: Dmi7 (below the first measure), G7 (below the second measure), and Emi7 (below the third measure). There are also passing chords: Ami7 (below the second measure), Bmi7 (below the second measure), Cma7 (below the second measure), and D#o7 (below the second measure).

## Ex. #363

SC

Example 363 shows a melody and bass line in 4/4 time. The melody is in treble clef, and the bass line is in bass clef. The key signature has one flat (Bb). The melody consists of a half note D4, a quarter note E4, a quarter note F4, a quarter note G4, a quarter note A4, a quarter note Bb4, a quarter note C5, and a half note Bb4. The bass line consists of a half note Bb3, a quarter note A3, a quarter note G3, a quarter note F3, a quarter note E3, a quarter note D3, a quarter note C3, and a half note Bb3. The chord symbols are: Dmi7 (above the first measure), G7 (above the second measure), and Cma7 (above the third measure). The bass line has chord symbols: Dmi7 (below the first measure), Emi11 (below the first measure), Fma7 (below the first measure), G9 (below the second measure), Bmi7 (below the second measure), Bbma7 (below the second measure), Ami9 (below the second measure), Fma7 (below the second measure), and Emi7 (below the third measure). There are also passing chords: Bbma7 (below the second measure) and Ami9 (below the second measure).

### MINOR KEY AREAS

- 63) If you are dealing with basic definitive chords in a MINOR KEY AREA (i.e.,  $\text{II mi7(b5)}$ ,  $\text{V7(b9)}$ ,  $\text{Imi}$ ) the HARMONIZATIONAL POSSIBILITIES are also stated in Table 11.
- 64) However, when in minor, relate the SCALE DEGREE of the bass note to those shown BELOW on Table 11.
- 65) The theory behind this is that the relative minor (i.e., C-Ami) relationship to the major scale allows us to use the same possibilities by simply considering the VI in major to be the I in the relative minor.
- 66) I suggest you transpose Table 11 into all other keys for your own reference. These reference tables will simplify your working procedure until experience helps you gain facility and familiarity. This is particularly true if you are not adept at the keyboard.
- 67) The next example illustrates a melodic fill based on a I,  $\text{II mi7(b5)}$  in A minor.

#### Ex. #364

The harmonization is derived from Table 11, utilizing the chords sources from the relative minor perspective.

- 68) Example 365 completes this two measure phrase, orchestrated for five saxes. This is also an example of increasing the density from one to five parts. (Refer to Section 4, on mixing 1, 2, 3, 4 and 5 part density.)
- 69) This reharmonized bass line is a difficult technique to master, requiring a complete understanding of the theory and procedure as well as a mature judgment of when and where to use it.

#### Ex. #365

### HARMONIZATION OF BLUES MELODIES

- 70) Melodies based on stylistic melodic functions such as those functions characteristic of the BLUES SCALE can present a problem in harmonization. The problem is a result of a conflict between BLUES MELODIES utilizing the lowered 3rd, 5th and 7th degrees of a major scale, and the basic chord symbols often given as a harmonization of those notes.
- 71) The arranger will find many melodic situations where the given chord symbol does not fit. The related problem in this area concerns THE PASSING OR NEIGHBORING TONES used in a BLUES idiom.
- 72) The solution of both areas of conflict is this:
- a) First, think of a BLUES melody or melodic style as ALTERATIONS OF A MAJOR SCALE.
  - b) Consider the harmonization of these melodic tones to have as a basic source Table 11.
  - c) The principal adjustments to Table 11 need only occur on the type of chords constructed from the 1st, 4th and 5th degrees of the scale.
- 73) Reviewing the theoretical explanations of Table 11, I pointed out that in the way the table was designed to be used (to harmonize the passing chords of a bass line), the harmonization purposely omitted the use of a dominant 7th chord. This reasoning was to help reinforce the DIATONIC SOUND OF THE KEY AREA.
- 74) In a BLUES SITUATION, this is now reversed. The I, IV and V chord roots may be harmonized in this fashion:
- | <u>ROOT</u> | <u>TYPE OF CHORD FAMILY</u>                 |
|-------------|---|
| I           | Dominant, altered dominant, minor 7th, Dim. |
| IV          | Dominant, altered dominant, minor 7th, Dim. |
| V           | Dominant, altered dominant, minor 7th, Dim. |
- 75) All harmonizations of the other scale degrees presented in Table 11 can be utilized as they are.



## SECTION III — HARMONIC CONSIDERATIONS

### Chapter 9: Pedal Point, Ostinato, Plurality and Harmonization

#### PEDAL POINT

- 1) **PEDAL POINT** is a particular device which has many possible applications. In essence, it is the use of a pedal tone **AGAINST** melodic and harmonic activity.
- 2) The pedal tone itself is most practically applied in relation to a key area or tonality. A tonic or dominant pedal is most often employed. This means the tonic or "DO" of a key area or dominant or "SOL" of a key area can be sustained or rhythmically used **COUNTER** or **AGAINST** the thematic and harmonic ideas.
- 3) The following example from **THE FLIGHT** shows, in sketch form, how the constant reference to the tonic of the F Dorian key area creates a "pedal effect."

Ex. #366

- 4) Another approach to the use of the pedal is based on melodic couplings. A basic melody/pedal idea is sketched (see Example 367) to which a specific harmonic structure is built parallel to each melody note. (See final sketch in Example 368.)

Ex. #367

Ex. #368

- 5) This approach (which has a reharmonizational effect) can be applied to an original melody of an intro, ending or interlude of a chart as well as to the actual melody of a composition.

### OSTINATO

- 6) An ostinato means a MELODIC PHRASE THAT IS PERSISTENTLY REPEATED IN THE SAME VOICE. In actual use, the voice and orchestration can, of course, be varied. The melodic figure can be a short or long thematic idea.
- 7) Regardless of the length of the motif or figure (2 notes, 2 measures) the repetitive application of the figure will usually require a relationship with the established key area.
- 8) This relationship is much more compatible in diatonic situations (major, modal, pentatonic scales) as opposed to modulatory harmonic situations. The following example from THE FLIGHT illustrates the use of an ostinato in the piano part, played over the band and based on a D Dorian mode.

Ex. #369

- 9) Many rock and jazz compositions are constructed with a melodic bass figure which functions as an ostinato. This example from Allyn Ferguson's **MARBLE ROCK** is a typical example of this application.

Ex. #370

SC

Medium Rock Tempo

(Brass)

(Saxes)

ostinato

### SUMMARY

- 10) The overall effect of an ostinato or pedal is that of a workable second or third melody or voice, played AGAINST the primary melody and harmonic voicing. An ostinato and pedal and primary melody and harmonic voicing can all be used at the same time, creating the excitement of all these factors superimposed and working off of each other. (See Example 366.)

### PLURALITY

- 11) A very important theoretical principle is that of plurality. A plurality means a multiple function. It also means that within these multiple functions you may think of any harmonic or melodic relationship in a double way. A simple example of this is the various ways in which the melodic tone C can have functions within the relationships of major scales.

The tone C could be thought of as:

- a) The I of the C Major Scale.
  - or b) The VII of the D<sup>b</sup> Major Scale.
  - or c) The VI of the E<sup>b</sup> Major Scale.
  - or d) The V of the F Major Scale.
  - or e) The IV of the G Major Scale.
  - or f) The III of the A<sup>b</sup> Major Scale.
  - or g) The II of the B<sup>b</sup> Major Scale.
- 12) This double way of thinking can now apply to chords. Using a CMaj 7 as an example, the 1, 3 and 5 of the CMaj 7 is a C MAJOR TRIAD. The 3, 5 and 7 is an E MINOR TRIAD.

Ex. #371

Ex. #371 illustrates the construction of a C Major 7 chord. The first staff shows a C Major 7 chord (C Maj 7) and a C triad (C). The second staff shows an E minor triad (E mi) and its constituent notes (E, G, B) grouped as (5, 3, 1) of C7. The third staff shows the E minor triad (E mi) and its constituent notes (E, G, B) grouped as (7, 5, 3) of C7 and (5, 3, 1) of E mi.

The C maj. 7, then, can be thought of as being formed by the combination of a C triad, and an E min. triad – OR as a four part chord built from C.

- 13) To carry this idea of PLURALITY to its fullest extent, study Example 372. The 7-part D min. 13th chord can be thought of as the combination of five different triads; or four different 7th chords; or three ninth chords or two 11th chords. The same number of interior or smaller chords make up ANY 13th structure.

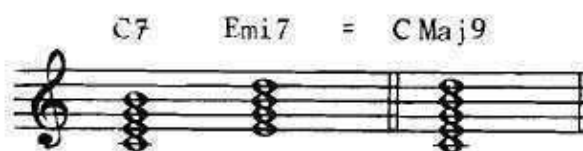
Ex. #372

Ex. #372 illustrates the construction of a D minor 13th chord (D mi. 13) from various triads and chords. The diagram shows a D minor 13th chord on the left, which is then broken down into five different triads: E minor (E mi), C major (C), A minor (A mi), F major (F), and D minor (D mi). These triads are then combined into four different 7th chords: C7, A minor 7 (A mi 7), F7, and D minor 7 (D mi 7). These 7th chords are then combined into three different 9th chords: A minor 9 (A mi 9), F major 9 (F Maj 9), and D minor 9 (D mi 9). Finally, these 9th chords are combined into two different 11th chords: F major 9 (+11) (F Maj 9(+11)) and D minor 11 (D mi 11).

- 14) Still another way of looking at a practical application of PLURALITY would be the relationship between the DIATONIC CHORDS OF THE MAJOR SCALE.

- 15) For example, a C maj. 9 chord contains the notes C, E, G, B and D. However, if we break down the 5 part chord in the following manner we will discover TWO 4-PART CHORDS.

Ex. #373



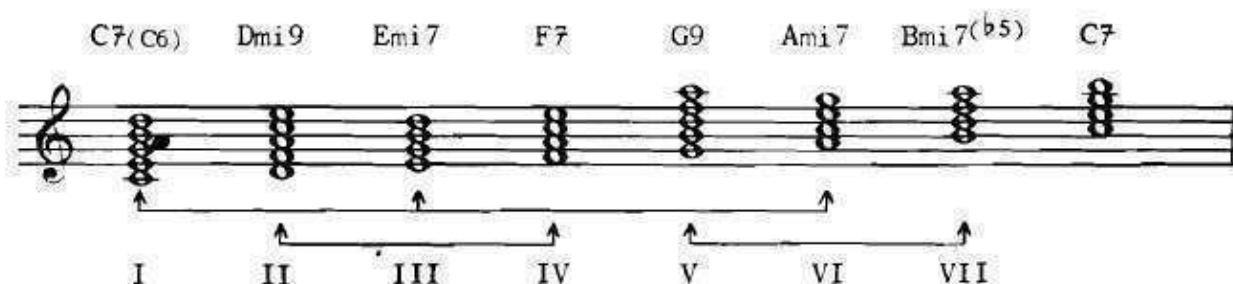
The Emi7 chord has a plural chord relationship with the top four notes of the C Maj. 9th chord.

Ex. #374

7	D	9
5	B	7
3	G	5
1	E	3
(Emi7)		(CMaj9)

- 16) By applying the above process to the diatonic chords built from the seven scale tones, we can arrive at the following relationships as indicated by the brackets in Example 375.

Ex. #375



- 17) An explanation of the relationship of the bracketed chords would be:

- The Emi7 is the 3, 5, 7, 9 of a C Maj9.
- The Ami7 is the 6, 1, 3, 5 of a C6.  
(Along with the CMaj7(I) the Emi7 and Ami7 are simply substitutions for the I chord.)
- The Fmaj7 is the 3, 5, 7, 9 of a Dmi9.  
(The Fmaj7 [IV] is a substitute for a IImi7.)
- The Bmi7(b5) is the 3, 5, 7, 9 of a G9.  
(The Bmi7 [b5] [VII] is a substitute for a V9.)



- 18) The final conclusion then, is that the basic progressions (or chord families) representing a KEY AREA are II-V7-I and IV-V7-I, in major and minor. The remaining diatonic chords III mi7, VI mi7 and VII mi7 ( $\flat 5$ ) are substitution chords for the V9 and I chords.

Ex. #376

The diagram illustrates the relationship between diatonic chords and their substitutions in a key area. It is organized into three columns and three rows of musical staves. A bracket labeled "Substitutions" spans the top of the second and third columns.

- Column 1:** I Maj7, II mi7, V7
- Column 2:** III mi7, IV Maj7, VII mi7 ( $\flat 5$ )
- Column 3:** VI mi7

Each chord is represented by a staff with its notes. The substitution relationship is indicated by the bracket over the second and third columns, suggesting that the chords in these columns can substitute for the V9 and I chords.

- 19) With this in mind, we can now use PLURALITY as a basis for chord substitution.

- a) Minor 7th chords that are really INCOMPLETE Major 9th chords.

Ex. #377

The diagram shows two musical staves. The first staff contains the chord E mi7, and the second staff contains the chord C ma9. A curved arrow points from E mi7 to C ma9, indicating that E mi7 is an incomplete C major 9th chord.

- b) Major 7th chords that are really INCOMPLETE Minor 9th chords.

Ex. #378

The diagram shows two musical staves. The first staff contains the chord F7, and the second staff contains the chord D mi9. A curved arrow points from F7 to D mi9, indicating that F7 is an incomplete D minor 9th chord.

- c) Minor 7 ( $\flat 5$ ) chords that are really INCOMPLETE Dom. 9th chords.

Ex. #379

The diagram shows two musical staves. The first staff contains the chord B mi7 ( $\flat 5$ ), and the second staff contains the chord G9. A curved arrow points from B mi7 ( $\flat 5$ ) to G9, indicating that B mi7 ( $\flat 5$ ) is an incomplete G dominant 9th chord.

- d) Diminished 7th chords that are really INCOMPLETE Dom.7 ( $b9$ ) chords.

Ex. #380



- e) Minor 6th chords that are really INCOMPLETE Dom. 9th chords.

Ex. #381



- f) Minor 7th ( $b5$ ) chords that are PLURAL to Minor 6th and Major 6 ( $b5$ ) chords.  
(Also Minor 6th chords that are PLURAL to Minor 7th ( $b5$ ) chords.)

Ex. #382



Ex. #383

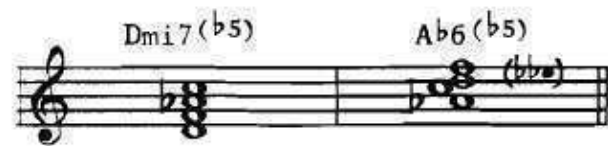


TABLE 12

	A	B	C	D	E	F	G	H	
INTERVAL:	OCTAVE	1/2 STEP	WHOLE STEP	AUG.2	MIN.3	MA 3	4th or 11	+4 or +11	
FUNCTION:	ROOT	b9th	9th	#9th	b3rd	3rd	4th or 11th	+11th	
1	A N Y	7(b9)	6 <sup>9</sup>	7(+9)	min.	Maj.	Ma.(sus 4)	Ma9(+11)	1
2		7 <sup>(b9)</sup> <sub>(b5)</sub>	Ma9	7 <sup>(+9)</sup> <sub>(b9)</sub>	mi(+5)	Ma(b5)	min11th	9(+11)	2
3		+7(b9)	Ma9(+11)	+7(+9)	mi6	6	min11(b5)	7 <sup>(+11)</sup> <sub>(b9)</sub>	3
4		+7 <sup>(b9)</sup> <sub>(b5)</sub>	mi6 <sup>9</sup>	7 <sup>(+9)</sup> <sub>(b5)</sub>	mi6 <sup>9</sup>	6(b5)	min11(+5)	7 <sup>(+11)</sup> <sub>(+9)</sub>	4
5		7 <sup>(+9)</sup> <sub>(b9)</sub>	mi9	+7 <sup>(+9)</sup> <sub>(b9)</sub>	mi7	Ma7	min11 <sup>(+5)</sup> <sub>(b5)</sub>	7 <sup>(+11)</sup> <sub>(+9)</sub> 7 <sup>(+9)</sup> <sub>(b9)</sub>	5
6		+7 <sup>(+9)</sup> <sub>(b9)</sub>	miMa9	+7 <sup>(+9)</sup> <sub>(b9)</sub> 7 <sup>(+9)</sup> <sub>(b5)</sub>	mi7(b5)	Ma7(b5)	11th.	13(+11)	6
7	C	+7 <sup>(+9)</sup> <sub>(b9)</sub> 7 <sup>(+9)</sup> <sub>(b5)</sub>	mi9(b5)	7 <sup>(+11)</sup> <sub>(+9)</sub>	mi7(+5)	Ma7(+5)	11(b9).	13 <sup>(+11)</sup> <sub>(b9)</sub>	7
8	H	11(b9).	mi9(+5)	7 <sup>(+11)</sup> <sub>(+9)</sub> 7 <sup>(+9)</sup> <sub>(b9)</sub>	mi7 <sup>(+5)</sup> <sub>(b5)</sub>	Ma7 <sup>(+5)</sup> <sub>(b5)</sub>	o7 <sup>(add)</sup> <sub>4</sub>	o7	8
9	O	7 <sup>(+11)</sup> <sub>(b9)</sub>	mi9 <sup>(+5)</sup> <sub>(b5)</sub>	7 <sup>(b13)</sup> <sub>(+9)</sub> ..	miMa7	Ma6 <sup>9</sup>		o7 <sup>(add)</sup> <sub>9</sub>	9
10	R	7 <sup>(+11)</sup> <sub>(+9)</sub> 7 <sup>(+9)</sup> <sub>(b9)</sub>	9	7 <sup>(b13)</sup> <sub>(+9)</sub> 7 <sup>(+9)</sup> <sub>(b9)</sub> ..	miMa7(+5)	Ma9			10
11	D	7 <sup>(b13)</sup> <sub>(b9)</sub> ..	9(b5)		mi9	Ma9(+11)			11
12		7 <sup>(b13)</sup> <sub>(+9)</sub> 7 <sup>(+9)</sup> <sub>(b9)</sub> ..	+9		miMa9	A N Y  D O M I N A N T  C H O R D			12
13		13 <sup>(+11)</sup> <sub>(b9)</sub>	+9(b5)		mi9(b5)				13
14			9(+11)		mi9(+5)				14
15			o7 <sup>(add)</sup> <sub>9</sub>		mi9 <sup>(+5)</sup> <sub>(b5)</sub>				15
16					mi11				16
17					mi11(b5)				17
18					mi11(+5)				18
19					mi11 <sup>(+5)</sup> <sub>(b5)</sub>				19
20					min13th				20
21					o7				21

\* - Omit 3rd of Chord

\* \* - Omit 5th of Chord

TABLE 13

	I	J	K	L	M	N	O	P	
INTERVAL:	Dim5	Per. 5	Aug 5	Min 13	Ma 6	13	Min 7	Ma7	
FUNCTION:	b5th	5th	+5th	b13th	6th	13th	7th	Ma7	
1	Ma(b5)	Ma	Ma7 (+5)	7 <sup>(b13)</sup> <sub>(b9)</sub> **	6	Ma13(+11)	mi7	Ma7	1
2	6(b5)	6	Aug.	7 <sup>(b13)</sup> <sub>(+9)</sub> **	6(b5)	mi13	mi7(b5)	Ma7(b5)	2
3	Ma7(b5)	Ma7	Ma7 <sup>(+5)</sup> <sub>(b5)</sub>	7 <sup>(b13)</sup> <sub>(+9)</sub> <sub>(b9)</sub> **	6 <sup>9</sup>	mi13(b5)	mi7(+5)	Ma7(+5)	3
4	Ma7 <sup>(+5)</sup> <sub>(b5)</sub>	6 <sup>9</sup>	mi(+5)	MaTriad/3	Ma7(6 <sup>9</sup> )	13(+11)	mi7 <sup>(+5)</sup> <sub>(b5)</sub>	Ma7 <sup>(+5)</sup> <sub>(b5)</sub>	4
5	Mi7(b5)	9	mi7(+5)		mi6	13 <sup>(+11)</sup> <sub>(b9)</sub>	mi9	Ma9	5
6	mi9(b5)	Ma(sus 4)	mi7 <sup>(+5)</sup> <sub>(b5)</sub>		mi6 <sup>9</sup>	13 <sup>(+11)</sup> <sub>(+9)</sub> <sub>(b9)</sub>	mi9(b5)	Ma9(+11)	6
7	mi9 <sup>(+5)</sup> <sub>(b5)</sub>	Ma9(+11)	miMa7(+5)		miMa9(6)		mi9(+5)	miMa7	7
8	mi11(b5)	min	mi9(+5)		o7		mi9 <sup>(+5)</sup> <sub>(b5)</sub>	miMa7(+5)	8
9	mi11 <sup>(+5)</sup> <sub>(b5)</sub>	mi6	mi9 <sup>(+5)</sup> <sub>(b5)</sub>		o7 <sup>(add)</sup> <sub>9</sub>		mi11	miMa9	9
10	mi13(b5)	mi6 <sup>9</sup>	mi11(+5)				mi11(b5)	o7 <sup>(add)</sup> <sub>7</sub>	10
11	7(b5)	mi7	mi11 <sup>(+5)</sup> <sub>(b5)</sub>				mi11(+5)	o7 <sup>(add)</sup> <sub>(9 7)</sub>	11
12	+7(b5)	miMa7	+7				mi11 <sup>(+5)</sup> <sub>(b5)</sub>	ANY DOM. CHORD	12
13	9(b5)	mi9	+7(b5)				mi13		13
14	+9(b5)	miMa9	+9				mi13(b5)		14
15	7 <sup>(b9)</sup> <sub>(b5)</sub>	mi11	+9(b5)				ANY AUG7 CHORD		15
16	+7 <sup>(b9)</sup> <sub>(b5)</sub>	mi13	+7(b9)						16
17	7 <sup>(+9)</sup> <sub>(b5)</sub>	7	+7 <sup>(b9)</sup> <sub>(b5)</sub>						17
18	+7 <sup>(+9)</sup> <sub>(b9)</sub> <sub>(b5)</sub>	9	+7(+9)						18
19	o7	11.	+7 <sup>(+9)</sup> <sub>(b9)</sub>						19
20	o7 <sup>(add)</sup> <sub>9</sub>		+7 <sup>(+9)</sup> <sub>(b9)</sub> <sub>(b5)</sub>						20
21			o7 <sup>(add)</sup> <sub>(+5)</sub>						21

\* - Omit 3rd of Chord

\*\* - Omit 5th of Chord

### HARMONIZATION

- 20) The ability to harmonize a melody has the following applications for an arranger:
- a) To create introductions; interludes; turnarounds; endings; new original sections of an arrangement; background fills; chord substitutions; reharmonizations and passing chords.
- 21) Certain basic rules apply to the possible melody notes that fit any given chord. These rules can be deduced by studying Tables 1 through 4.
- 22) These conclusions regarding the possible melody-chord relationships are now summarized in the following Tables 12 and 13. They are to be read in the following manner:
- a) The top heading of each column is the **INTERVAL DESIGNATION**. The columns are lettered A through P. **THIS MEANS WHEN YOU DETERMINE THE EXACT INTERVAL BETWEEN THE MELODY NOTE AND A POSSIBLE ROOT, YOU THEN REFER TO THAT COLUMN OF EITHER TABLE.**
  - b) The **FUNCTION** heading above each column corresponds to the **INTERVAL** heading, except that it qualifies each interval as to how that particular interval functions to the root of a chord. A half step (or minor 9th) interval between the root and melody note would always actually function as flat 9, automatically throwing any harmonization of that interval into a dominant or augmented chord category.
  - c) Each of the chord symbols listed in each column is a possible chord structure that correctly harmonizes the relationship between the melody note and the root.
  - d) Once the correct column has been determined, the list of possible chord symbols should be examined to determine the best choice.
  - e) Any of the chord symbols printed in **BOLDER TYPE FACE** are considered prime choices. Whenever you have a range of possibilities from simple three and four part chords up to six and seven part altered chords, try to pick the simpler chord symbol. This will always produce a more natural **LESS FORCED EFFECT**.

- 23) Use these Tables 12 and 13 to check your melody-chord possibilities until you have had sufficient experience to enable you to HEAR and be aware of all possibilities. WHEN IN DOUBT — CHECK IT!

### HARMONIC FACILITY

- 24) A most basic prerequisite to any arrangement is the manipulation of the existing original harmonies. This manipulation means the facility to substitute strong chords for weak sounding chords; reharmonize where desired to produce different musical styles or to implement certain effects or moods.
- 25) This harmonic facility also enables the writer to more effectively create "free areas" of an arrangement. By the term "free area" I mean those portions of a chart that are not included in the original lead of a composition (i.e., introductions, interludes, turnarounds, endings, original sections of an arrangement).
- 26) An overall technique to be mastered is the ability to harmonize any melody note. This calls for being aware of many possible harmonic solutions in any situation, and selecting the specific harmonization which best reinforces THE STYLE of the arrangement, and which best reflects the EFFECT desired.
- 27) Much of this harmonic facility is predicated on a knowledge of basic modern harmony and theory. A detailed explanation for the arranger of possibilities, application and exercise assignments are available in Volume III of the Encyclopedia of Basic Harmony and Theory Applied to Improvisation On All Instruments or individual lessons in my improvisation course.
- 28) The following areas are described. I list here the particular lesson from Volume III that covers each of these areas:

#### LESSON 22, PART 1 — The Theory of Harmonization, Chord Substitution and Reharmonization

Substitution of the

Diminished 7th Chord;

The Augmented Chord;

The Minor 6th Chord;

Related Substitutions

WORKSHEET 22, PART 1 — Examination covering all of the above.

#### LESSON 22, PART 2 — The Theory of Harmonization, Chord Substitution and Reharmonization (continued)

The II-V Substitution;

Substitutions on the II-V-I Progression;

Chromatic Dominant Approach Chords;

Plurality as a Basis for Chord Substitution;

Modal Substitutions;

Applied to the II-V-I Chords;

Analysis of the Form of Jazz, Rock and Popular Compositions.

WORKSHEET 22, Part 2 — Examination covering all of the above.

**LESSON 23, PART 1 — Reharmonization**

Harmonization Tables 20 and 21

Set forth procedures for harmonizing any melody —

Characteristics of Reharmonization.

The Circle of 5th Root Movement;

The Chromatic Root Movement;

The Diatonic Parallel Root Movement.

WORKSHEET 23, PART 1 — Examination covering all of the above.

**LESSON 23, PART 2 — Standard Reharmonizations**

Applied to	The I Chord
	The II <sup>mi</sup> 7-V7 Chord
	The I <sup>min</sup> Chord
	The V7 Chord
	The I-II <sup>mi</sup> 7-V7-I Chord

Polychord Notation —

Tables 22 and 23, showing standard notation, polychord notation and scale sources.

WORKSHEET 23, PART 2 — Examination covering all of the above.

**LESSON 24, PART 1 — Altered Chords as a Means of Reharmonization**

Alterations of the I to IV Chord

Alterations of the II to V Chord

Alterations of the V to I Chord

Scale Sources for Altered Chords

TABLE 24 COVERS ALL OF THE ABOVE.

The Free Areas:

Introductions;

Endings;

Turnarounds.

TABLES 25 AND 26 COVER ALL OF THE FOREGOING.

Harmonic Sources for Free Areas;

TABLE 27 COVERS THESE.

WORKSHEET 24, PART 1 — Examination covering all of the above.

**LESSON 24, PART 2 — Harmonizing a Melody by Analyzation of Scales**

How to Determine the Scales in a Melody

How to Determine the Basic Definitive Chords in a Scale

Harmonizing Melody in Specific Styles of Music

Suggested Basic Repertoire Every Improviser Should Know

WORKSHEET 24, PART 2 — Examination of all of the above.



## SECTION III — HARMONIC CONSIDERATIONS

### Chapter 10: Modulation

- 1) MODULATION is a term meaning the harmonic handling of a change of key or tonality. The harmonization of a composition can contain MODULATORY HARMONIES, meaning the tonality of the composition changes and moves to certain of the twelve major and minor key areas.
- 2) An understanding of how to create and control a modulation is important to the arranger from several standpoints. It enables the arranger to:
  - a) Create a modulation at any point he wishes.
  - b) Have the flexibility of the EFFECT of a modulation when needed.
  - c) Adjust to specific vocal and instrumental ranges that are most natural.
  - d) Handle involved production type medleys containing many, many modulations.

#### TYPES OF MODULATIONS

- 3) The first type of modulation is the direct modulation. In essence, there is no harmonic preparation.
- 4) A direct modulation has the following characteristics:
  - a) It is most effective at the beginning of a chorus or a phrase.
  - b) It is most typical moving to a new key area above the original key (half, whole step, 3rd, 4th).
  - c) It is most effective when the first chord is a clearly stated II<sup>mi</sup>7, V7 or I chord in a major key area or II<sup>mi</sup>7(b5), V7(b9) or I<sup>mi</sup> chord in a minor key area. Any conventional substitute chord for the above definitive chords also work.





## Ex. #387

- 8) In Example 385, the first four measures represent the last four measures of a 32 measure chorus. To modulate from the key of C major to Eb major, I need to precede the first chord in the key of Eb (the Ebmaj7 chord functioning as a Imaj7th) with the II mi7, V7 in the new key area. (See Point X in Examples 385, 386 and 387.)
- 9) This basically, then, is a matter of working BACKWARDS in 5ths from the Eb root.

## Ex. #388

- 10) When played, of course, it becomes II mi7-V7-I in Eb major. Once this harmonic foundation has been set up I consider myself in the key of Eb major AS SOON AS THE Fmi7 IS PLAYED. Therefore, any melodic line would be built from the Eb major scale.
- 11) Example 386 is the same problem except that the first chord in the new key of Eb is a II mi7(Fmi7) instead of a Imaj7. I need to precede the first chord (the Fmi7, functioning as a II mi7) with a II mi7-V7 of this first root (i.e., Fmi7).
- 12) Working backwards in 5ths from the "F" root, I would get:

## Ex. #389

- 13) The important point here is that the first chord of the new key must be preceded by a min7 and dominant 7 chord, moving in the circle of 5ths.
- 14) Example 387 shows still another solution. In this example, the first chord in the new key functions as a IVmaj7. By working backwards on the circle of 5ths, I am MOMENTARILY treating the IV chord as a I in Ab.

Ex. #390

Diagram illustrating a chord progression in Example 390. The progression consists of three chords: Bbm7, Eb7, and Abma7. The chords are connected by arrows indicating a 5th root movement. A box labeled "SC" is positioned above the Eb7 chord.

- 15) Example 387 can also be handled another way. Point Y illustrates the result of continuing to work backwards on the circle of 5ths. This approach lengthens the modulatory section, increasing the interest. Any melodic considerations in measure 31 of Example 387 must, of course, be adjusted to the new key area of Bb.

### RANDOM MODULATIONS

- 16) In certain instances the desired effect from the modulation is to prolong the modulation. The longer harmonic journey can add interest and help produce a more climactic "payoff" when the final key is reached. (See Point Y in Example 387.)
- 17) With this in mind, any number of random pairs of chords moving in perfect 5ths or by step can be used (see Examples 391 and 392) finally moving into the last chord by a 5th root movement, or a 1/2 step root movement.

Ex. #391

Diagram illustrating a chord progression in Example 391. The progression consists of the following chords: Dmi7, G7, Cma7, Fma7, Bmi7, E7, F#7(b9)B7(b9), E7(+9)A13, and Ab. The progression includes 5th and 1/2 step root movements. A box labeled "SC" is positioned at the end of the progression.

Ex. #392

Diagram illustrating a chord progression in Example 392. The progression consists of the following chords: Dmi7, G7, Fmi7, Bb7, Emi7, A7, Bmi7, E7, Bbm7, Eb7, and Ab. The progression includes 5th and 1/2 step root movements. A box labeled "SC" is positioned at the end of the progression.

More detailed possibilities for "random modulations" can be found in Volume III of the Encyclopedia of Harmony and Theory as Applied to Improvisation on All Instruments, Lesson 23, Part I.

- 18) When employing these more extensive modulatory passages, you always have the added responsibility of creating an effective melody.
- 19) Because of the constantly changing key areas in a modulation such as the one shown in Example 392, one of the more important melodic problems is that of **CONNECTING** or **BRIDGING FROM ONE KEY AREA** to another in a melodically interesting way.

### COMMON TONE

- 20) One effective technique that deals with this problem is that of using a melody note that is common to the last chord of one key area, and also common to the first chord of the following key area. Example 393 illustrates a possible melodic solution to the harmonies used in Example 389. The common tone technique is used to connect each key area.

Ex. #393

m.m. ♩=120

SC      Modulation

Dmi7      G 13      Cma7      Fma7      Bmi7      E7

F#7(b9)      B7(b9)      E7(+9)      A 13      A♭ma7

- 21) Note the contrasting rhythmic patterns used in each measure of the modulation.
- 22) Even though the common tone technique suggests a definite melodic approach, do not automatically or academically choose your melodies. Always play or sing your possible melodic ideas to make sure they are **PLEASING AND EFFECTIVE IN RELATION TO THE HARMONIC MODULATION**.

**SEQUENTIAL MELODIES**

- 23) Modulations based on the type of chord patterns used in Example 393 can make good use of sequential melodic phrases. (See Chapter 4.) The use of sequence helps a great deal to add continuity to the modulation. Example 394 illustrates a sequential treatment of the modulation based on harmonies in Example 393.

Ex. #394

- 24) Each bracket shows the melodic use of the 5th interval. Variation of rhythm and melodic direction is usually needed to avoid monotony.

**SEQUENTIAL PHRASES**

- 25) Another approach is the use of melodic ideas covering one, two, or four measure phrases, based on a sequential idea.

Ex. #395

- 26) Sequential treatments do not have to be exact. You can be flexible melodically, harmonically and rhythmically. However, if too much variation is made, the effect has less of a sequential continuity and it is a matter of determining the result you wish.

- 27) When working out any modulation, be very sure of the basic idea, harmonization and rhythm pattern. One good suggestion is to start eight measures before the modulation to establish the key feeling, play through the modulation and into the new key four measures or so. It is at this point that it is easier to judge the total effect and flow of the modulatory phrase **IN RELATION TO THE OLD AND NEW KEY AREAS.**

### SUMMARY

- 28) Any modulation (other than direct) has one primary function. This is to lead the ear from one key area to another. A good modulation is then the result of harmonic, melodic and rhythmic ideas that combine to be strong, interesting musical statements. Because of the responsibility inherent in a modulation, there is no room for second best ideas. A modulation can be the **WEAKEST SEGMENT OF A CHART** if not handled well. If done musically, it can become one of the strongest segments, adding interest and variation.
- 29) Consequently, do not try to construct modulations just for the sake of being different. There should not **BE** a modulation without a very logical reason. Once you determine there should be one, it is usually the simple, unpretentious approach that **SOUNDS** best.
- 30) The following is an example of a modulation from my chart on **FOOLS RUSH IN.**

#### Ex. #396

**FAST ROCK**

Gmi C Gmi C Gmi Gmi C Gmi C Gmi Gmi C

Gmi C Gmi7 Bbm7 Eb Bbm7 Bbm7 Eb Bbm7

common tone

**DIRECT HARMONIC MODULATION**

## SECTION III — HARMONIC CONSIDERATIONS

### Chapter 11: The Free Areas

#### Introductions, Endings, Turnarounds

- 1) The term **FREE AREA** describes any portion of a chart that is not specifically included in the sheet music or fake book version of the composition: the introduction, ending (tag) or the turnaround.
- 2) The arranger, of course, must determine all the factors involved in these portions of his chart: the melodic line, harmony and rhythm. All these components are decided on before the job of arranging and orchestrating begins. When the sketch of a **FREE AREA** is finished, you simply have a lead sheet sketch of this section.
- 3) Although the arranger is composing the free area, it is not quite like composing an individual composition. The reason is that **FREE AREAS** are extensions of **THE STYLE** of the arrangement, the melodic, harmonic and rhythmic characterizations of the body of the chart itself. In many instances, an individual phrase, progression or rhythm pattern from the composition can be used as the basis of the free area.

#### INTRODUCTIONS

- 4) Introductions have several functions:
  - a) To "start" the music effectively and interestingly.
  - b) To harmonically "lead into" the first chord of the composition.
  - c) To be harmonically in character with the desired musical style.
  - d) Sometimes to "preview" the first measures of the composition or some **KEY SEGMENT** of the composition.

NOW WE WILL EXAMINE THESE FUNCTIONS:

- 5) To "start" the music is obvious. The only point to consider is whether the introduction is necessary at all. In some cases, no introduction at all is desirable and can be more effective.
- 6) An introduction should not be an **INDEPENDENT HARMONIC STATEMENT** in the sense that in selecting a progression for an introduction a primary consideration must be to harmonically lead into the first chord of the composition in the most natural way.

- 7) Modal and blues compositions will most characteristically use some type of VAMP chord progression from the composition itself for an introduction. If a tune is a more harmonically definitive composition, refer to Example 397 for the most effective last chord of the introduction.

**Ex. #397**

IF THE FIRST CHORD IS A:	LEAD INTO THE FIRST CHORD WITH:
1) I CHORD 2) Imin Chord 3) I7 Chord	V7, II <sup>b</sup> 7, II <sup>b</sup> ma7, VII <sup>b</sup> 9 V7 (b9), VI <sup>b</sup> 9, II <sup>b</sup> 9, II <sup>b</sup> ma7, VII <sup>b</sup> 9 I, Ima7, II <sup>b</sup> 9
4) II <sup>mi</sup> 7 Chord 5) II7 Chord	I <sup>#</sup> o7, III <sup>b</sup> o7, III <sup>b</sup> 9, III <sup>b</sup> mi7, VI7, VI <sup>mi</sup> 7 I
6) IIImin Chord	VII7 (b9), IVma7, IV9
7) IVmaj Chord 8) IVmin Chord	I7, Ima7, I+7 (b9), V <sup>b</sup> 9, IV <sup>#</sup> mi7 (b5) I7 (b9), V <sup>b</sup> 9
9) V or V7 Chord	I, VI <sup>b</sup> 9
10) VImin Chord 11) VI7 Chord	III7 (b9), VII <sup>b</sup> 9, V <sup>#</sup> o7, IV9 I, VII <sup>b</sup> 9, III9
12) VII7 Chord	I, I7

- 8) The third function of an introduction is that it be harmonically in character with a particular musical style.
- 9) The fourth function of an introduction is to preview the first measures of a composition or some KEY SEGMENT of the composition. Most introductions have the characteristic of, or are a VAMP PROGRESSION. This means the progression leads back from the last chord to the first chord again.

If the first two or four measures of a composition are, in fact, harmonized by a Vamp Progression, we are then simply using this same Vamp Progression to function as the introduction.

- 10) By the same token, if some more interesting and less common progression in the composition can be made to work like a vamp progression (meaning the progression leads back from the last chord to the first chord again), then this can also be utilized for an introduction.

### ENDINGS OR TAG ENDINGS

- 11) Endings or Tag Endings function in several ways:
- To "end" the music.
  - To produce more naturally the effect of coming to a logical finish by "slowing down" rhythmically.



- c) To produce more naturally the effect of coming to a logical finish by playing the last phrase in **DOUBLE METER**, effecting a slowing down, not by slowing the tempo, but by doubling the **TIME VALUE** of **EACH BEAT**.
- d) To extend the "ending phrase" to the extent that it becomes a new section or important portion of the overall form.
- e) To harmonically or rhythmically characterize a specific style or idiom of music.
- f) To build into a dramatic finish by effecting a peak climax.

**NOW WE WILL EXAMINE THESE FUNCTIONS:**

- 12) To "end" the playing: Again, this is obvious. However, a decision must be made to determine if the song or chart should end "out in meter" (meaning no extension or addition of measures) or if a **TAG EXTENSION** should be added.
- 13) A very conventional ending concept is **NOT** to add measures (effecting a **TAG**), but to **RITARD** or **SLOW DOWN** the last phrase or beats. This, typically, is used when playing ballads, and produces a more dramatic, attention getting result.

**Ex. #398**

The musical notation for Example 398 consists of two staves of music in 4/4 time. The first staff contains measures 29, 30, and 31. Measure 29 has a **Gmi7** chord. Measure 30 has an **E<sup>b</sup>9** chord. Measure 31 has an **F** chord. The second staff contains measures 32, 33, and 34. Measure 32 has an **A7** chord. Measure 33 has a **D7** chord and a **Gmi7** chord. Measure 34 has an **F** chord. The notation includes various performance markings: **ritard** (ritardando) starting at measure 33, **slowly** starting at measure 34, and a box labeled **SC** (Song Climax) at the end of measure 34. The chords are: **Gmi7**, **E<sup>b</sup>9**, **F**, **Bmi7(b5)**, **B<sup>b</sup>7**, **A7**, **D7**, **Gmi7**, **Gmi7/C**, **F**, **B<sup>b</sup>mi7**, **Fma7**.

- 14) Example 398 is the last eight measures of **TIME AND TIME AGAIN**. In this example, no measures have been added. Instead, the tempo has been **RITARDED** starting on the downbeat of measure 33. The final three measures would usually be played in a very deliberate, gradually slower manner.

- 15) This same general effect can be produced another way as shown in Example 399.

Ex. #399

(m.m. ♩ = 96)

SC

Cm7 (25) Ab9 (26) Bbm9 (27) Cm9 (28) Dm7 (28) Gm7 (28) Cm7 (29)

Cm7/F (30) F7 (30a) Bb6 (31) Ab9 (31a) Ab9 (32) Bbm7 (32a)

Each beat doubled in length. ♩ = ♩

- 16) In this example the DOUBLE METER starts in measure 30. Measures 30 and 30a represent what originally was only measure 30. (Compare 30 and 30a to measure 30 in Example 398.) The entire last three measures have now become six measures. The tempo remains constant, finally ending in tempo.

- 17) Paragraph 11c describes the approach of adding measures to produce an extended ending.

Ex. #400

(m.m. ♩ = 120)

Sequence of meas. 29 and 30

SC

Dm7 (28) Gm7 (28) Cm7 (29) F7 (30) Dm7 (30a) G7 (30b) Cm7 (30c) Cm7/F (30d) Bbm9 (31) Ab9 (31) Bbm9 (32)

X

- 18) Measures 29 and 30 have been repeated. However, the repeat (measures 30a and 30b) are a SEQUENCE\*\* of measures 29 and 30. The typical harmonic approach that goes with this extension of measures is to utilize a CIRCLE OF 5TH relationship, working backwards from Point X (refer to Example 400). Following this, measures 29 and 30 are repeated again (*exactly*) and then the final measures (31 and 32) are played.

\*\*SEQUENCE – A rhythmic and directional repetition of a previous thematic idea, but pitched on a different degree of the scale.

- 19) Paragraph 11d describes the exaggerated extended ending to the point where the tag becomes an entire section of the overall form.

## Ex. #401

(m. m. ♩ = 120)

SC

Dmi7 (28) Gmi7 Cmi7 (29) F7 (30)

Dmi7 (29a) G+7(+9) Cmi7 (30a) F+7(b9) Bb6 (31) Ab9 Bbma9 (32)

- 20) Measures 29a and 30a become a VAMP PROGRESSION. (This usually will be a III-VI-II-V circle of 5ths progression.) These two measures could be played from three times to three minutes, depending on the desired effect.
- Finally, measures 29 and 30a would be played followed by 31 and 32. This particular effect is typical of a jazz style.
- 21) The ROCK STYLED equivalent of this would be to use a predominant 2, 4 or 8 measure phrase as an ending.
- This phrase would be repeated ad infinitum. In most recording situations, a rock arrangement "never ends." Instead, the repeated phrase is gradually faded out.
- 22) Many endings are nothing more than stereotyped cliches, a product of the evolution of the most frequently used endings in a particular style such as dixieland, blues, softshoe or the early jazz era.
- When writing in one of these specific styles the use of a typical ending helps establish the style and keeps the rendition "in character."

## Ex. #402

(m. m. ♩ = 152)

SWING STYLE

SC

C6 Dmi7 D#°7 C G7 C C

## Ex. #403

DIXIE  
STYLE

(m.m. ♩ = 80)

SC B $\flat$  D $\flat$ °7 Cmi7 B $\flat$  F7(+9) B $\flat$ 9

- 23) Finally, the dramatic ending may be produced in several ways. For example, by breaking tempo, sustaining a group of chords over which the instrumentalist improvises a cadenza (in whatever style is desired) on each of the sustained chords.

## Ex. #404

(m.m. ♩ = 96)

RITARD: Solo Cadenza ad lib. Solo Cadenza ad lib. Solo Cadenza ad lib. Solo Cadenza ad lib.

SC Cmi7 Cmi7/F A $\flat$ 13 D $\flat$ ma7 G $\flat$ ma9 B $\flat$ ma9

TURNAROUNDS

- 24) TURNAROUNDS deal with two factors:

One is the use of a specific type of progression that leads into the first chord of a new phrase of a composition.

The other is that it only occurs at certain places in a composition, depending on the particular FORM of that composition.

- 25) TURNAROUNDS are important in these ways:

- They progress harmonically at a point in a composition where the MELODY IS SUSTAINED OR TACIT.
- They are considered a FREE AREA because they present an opportunity to substitute many other progressions that can heighten interest or more effectively characterize a specific style of music.
- This flexibility is possible because the relationship of the chords in the TURNAROUND is not effected by a melody that is sustained or tacit.

- d) **TURNAROUNDS** may also be used to **RESTATE** a phrase used in an introduction. This restatement creates a continuity of **THEMATIC MATERIAL** and thereby helps to hold the arrangement or solo together.

26) **NOW WE WILL EXAMINE THESE FUNCTIONS:**

As was mentioned above in Paragraph 24, the places where **TURNAROUNDS** occur are determined by the **FORM** of the composition. In an "A" "A" "B" "A" form, this would be in the 7th and 8th measures of the first "A" phrase and in the 31st and 32nd measures, the last two measures of the final "A" phrase.

- 27) A comparative summary of **WHERE TURNAROUNDS** may be used in the more conventional song **FORMS** is presented in the following Example 405.

**Ex. #405**

FORM USED:	1st phrase	2nd phrase	3rd phrase	4th phrase
"A" "A" "B" "A"	LAST 2 MEASURES	-----	-----	LAST 2 MEASURES
"A" "B" "A" "C"	-----	-----	-----	LAST 2 MEASURES
"A" "B" "C" "D"	-----	-----	-----	LAST 2 MEASURES
"A" "A" "B" "C"	LAST 2 MEASURES	-----	-----	LAST 2 MEASURES

- 28) When reading Example 405, you should be aware that it is based on a conventional 32-measure song form.

If the composition is a **DOUBLE METER** 64 measure form, each **TURNAROUND** would consist of four measures instead of two as the table indicates.

If the composition is **HALF METER**, i.e., 16 measures in length, each **TURNAROUND** would only be one measure in length.

- 29) Because a **TURNAROUND** functions as a **FREE AREA**, other progressions may be used in place of the original harmonization. (Paragraph 25b.)

These **HARMONIC SOURCES** come from the following Progression categories:

- a) Any of the **VAMP PROGRESSIONS**.

Applying a **VAMP PROGRESSION** is dependent on whether the first chord of the next phrase is of the I chord family or of the II<sup>mi7</sup> chord family.

- b) Any of the **II-V-I** or **SUBSTITUTE II-V-I** progressions or certain of the **CIRCLE OF 5TH PROGRESSIONS**.

In many cases where **CIRCLE OF 5TH PROGRESSIONS** are applied, the I chord would be deleted, starting the **TURNAROUND** application with the second chord in the progression.

----- original progression -----

Ex. #406	C ///	E7 / A7 /	D7 / G7	C ///
Ex. #407	C ///	E7 / A7 /	D7 / G7 /	C ///

start here -----

- 30) Example 407 is the application of A CIRCLE OF 5TH PROGRESSION as a TURNAROUND.

The four chords E7-A7-D7-G7 comprise the TURNAROUND, leading into the C chord which represents the first chord of the next phrase.

- 31) We will now illustrate the application of other TURNAROUNDS in place of the original harmonization.

Example 408 is the 6th, 7th, 8th and 9th measures of a conventional 32 measure "A" "A" "B" "A" form.

The chord symbols above represent the original harmony and the chords below show two other progressions that may be used instead, either one creating a more modern effect.

**Ex. #408**

		TURNAROUND			
ORIGINAL CHORDS	---	Dmi7 / G7 / (6)	C / / / (7)	Dmi7 / G7 / (8)	C / / / (9)
ALTERNATE PROGRESSION	-----		C / Eb9 /	A <sup>b</sup> 9 / D <sup>b</sup> 9 /	C / / /
ALTERNATE PROGRESSION	-----		B <sup>b</sup> 9 / Eb9 /	Dmi7 / G7 /	C / / /

- 32) In using a TURNAROUND to restate a phrase from the introduction (see Paragraph 25d), the application may be quite literal. The most interesting or identifiable phrase (usually two measures in length) in the introduction may be repeated at each point where a TURNAROUND is possible.

As an example, review Example 405. A two measure phrase from an introduction may be repeated AT EACH POINT WHERE A TURNAROUND IS INDICATED IN EXAMPLE 405.

- 33) For a more detailed study of the harmonic possibilities for FREE AREAS and examples of all the applications mentioned, refer to Volume III of my **ENCYCLOPEDIA OF HARMONY AND THEORY APPLIED TO IMPROVISATION ON ALL INSTRUMENTS**, Lesson 24, Part 1.





## SECTION IV — DENSITY

### Chapter 12: One Part Density

#### AN APPROACH TO ORCHESTRATION AND VOICINGS

- 1) One of the most confusing and flexible areas of arranging concerns itself with the problems of orchestration and the voicings of the various instruments. The primary reason for the confusion is that in the normal learning process, no specific approach is used. Instead, most new arrangers learn by catching a few examples here and a few more there, with the result that every problem is a NEW problem. This lack of an overall perspective not only curtails their creative horizons, *IT PREVENTS THEM FROM ARRIVING AT A POINT OF VIEW from which they can have the UNDERSTANDING and COMPREHENSION necessary to enable them to make decisions, judgments and draw their own necessary conclusions.*
  
- THIS PROCESS OF ARRIVING AT KNOWING THE BEST DECISION OR DRAWING THE CORRECT CONCLUSION IS, IN ESSENCE, THE PROCESS OF ARRANGING.
  
- 2) Some of the factors involved are quite intangible. These are factors such as MUSICAL TASTE, STYLE, PURPOSE and EFFECT. Obviously, then, a well-rounded, informed arranger needs an overall understanding that enables him to have an awareness of a complete spectrum of orchestral and voicing possibilities.
  
- 3) Once this is accomplished he is in the very good position of having TOTAL CONTROL, TOTAL AWARENESS OF CHOICE and MASTERY OF ANY STYLE OF MUSIC OR DESIRED EFFECT.
  
- 4) Obviously, to attain this knowledge it is essential to approach the entire matter from a specific point of view, which, in its simplicity, produces a common denominator that applies to all the factors involved: MUSICAL TASTE, STYLE, PURPOSE and EFFECT.
  
- 5) The only prerequisite required is to understand the NEED for such a concept, and an unbiased attitude that will allow a clear and receptive mind.
  
- 6) Every note we write has a resultant EFFECT. If a writer is aware of this effect, he is able to accomplish his purpose. If he knows HOW to put certain notes together to create the effect BEFORE HE STARTS TO WRITE, he has eliminated the trial and error agony that usually accompanies a new writer's first attempts. More than that, it enables him to automatically reach the next level of writing ability, the level in which the primary thrust of his energy is pointed towards CONCEPTION. More often than not, the core of any problem in conception is not so much HOW to write something, but rather WHAT should be written at a specific point.
  
- 7) The logical starting point is to learn the EFFECT produced by assembling notes in particular ways. Much of this is so obvious that we tend to lose the POINT of what we are accomplishing. Many times the simplest voicings and orchestral combinations are the most effective solution to a problem.
  
- 8) By the same token, the more complicated techniques that produce the more stylistic and critical effects will only be mastered by understanding the basic techniques; and from the basic techniques, having an approach or concept that LEADS US THROUGH THE MORE COMPLICATED AREAS STEP BY STEP, completing the process of TOTAL CONTROL AND CRAFTSMANSHIP.

### DENSITY

- 9) We shall approach this concept by defining some terms which will give us a consistent, flexible means of interpreting the factors involved.
- 10) When instruments of a band are combined in any fashion, three elements are being defined. The first of these is the number of DIFFERENT pitches being played simultaneously or vertically. From this point on, we will refer to this as HARMONIC DENSITY or DENSITY. This does not include those pitches that are DOUBLED (same pitch played by more than one instrument). The DENSITY of any specific place in an arrangement can be from one to eight different pitches. The EFFECT of each level of DENSITY is different, ESPECIALLY IN RELATIONSHIP TO THE LEVEL OF DENSITY PRECEDING OR FOLLOWING THAT SPECIFIC POINT IN THE ARRANGEMENT. Another factor is the amount of doubling of notes by the instruments involved, producing the WEIGHT of the voicing.
- 11) A detailed study of one through eight parts density follows, in which the individual ramifications and implications as well as application (orchestration) will be discussed.

### SPAN OF ORCHESTRATION

- 12) A third factor which we need to be aware of is that of the DISTANCE FROM THE TOP TO THE BOTTOM OF ANY ORCHESTRAL VOICING. This SPAN OF ORCHESTRATION has a direct and interwoven relationship to the HARMONIC DENSITY. IT IS THE FACTOR THAT MAKES THE MUSIC THREE-DIMENSIONAL. Again, the spectrum of possibilities is great: from a prime unison to six octaves. Any gradation of these extremes produces an EFFECT. It is the combination of the EFFECT FROM THE HARMONIC DENSITY, WEIGHT AND THE EFFECT OF THE SPAN OF ORCHESTRATION THAT BRING ABOUT THE TOTAL RANGE OF ORCHESTRAL AND VOICING POSSIBILITIES.
- 13) Everything we shall discuss in this Section of the book will relate to these premises. EVERY TIME YOU LISTEN TO ORCHESTRAL MUSIC YOU SHOULD CONDITION YOUR EARS TO HEAR IN TERMS OF HARMONIC DENSITY, WEIGHT AND SPAN OF ORCHESTRATION. It is from these solid foundations that you can reproduce or invent any style or idiom of music. It is the catalyst that can open your ears and mind to a total musical experience.

### CONVENTIONAL AND NEW CONCEPTUAL APPLICATIONS OF DENSITY

- 14) To stress the total resources of the use of density and the span of orchestration, we must first isolate two basic applications of the theory of density.
- 15) The first is employing density in terms of CONVENTIONAL ORCHESTRATION. Conventional orchestration, in this sense, means any combination OTHER THAN MIXED SECTION VOICINGS OR SECTIONS OF THE BAND USING FEWER PARTS OF HARMONIC DENSITY THAN THERE ARE INSTRUMENTS IN THE SECTION.
- 16) As long as a voicing of an orchestration restricts itself to a natural section of a band, we can usually consider it conventional. Any listener of big band music knows that the majority of bands, such as Kenton, Basie, Herman, Rich or any of the bands from the "dance band era" used arrangements predicated on SECTION WRITING.



- 17) This concept is entirely valid and takes its place with my density orchestrational approach naturally and without qualification. As the following breakdown of one through eight parts of density will show, the SECTION WRITING possibilities, though limited, account for the majority of CONVENTIONAL BIG BAND WRITING EFFECTS, and thus could be considered the foundation of the arranger's source of voicings and orchestral sounds.
- 18) As you read the forthcoming breakdowns of one through eight part densities, those possibilities that relate to the CONVENTIONAL SECTION WRITING approaches will be pointed out. At the same time, other possibilities will be shown that have to do with our second application: NEW CONCEPTIONAL APPLICATIONS OF DENSITY.

### NEW CONCEPTIONAL APPLICATIONS OF DENSITY

#### A Working Procedure For

#### The Application Of The Density Approach

- 19) In this basic application of DENSITY a different premise is used altogether. It starts by going back to a writer's working procedure. Instead of preconceiving specific sections of the band orchestrally, we will start with a CONCERT SKETCH.
- 20) The purpose of this sketch is to define our HARMONIC, MELODIC AND RHYTHMIC ideas, WITHOUT PREASSIGNING SPECIFIC INSTRUMENTS. It is like saying: "This is the concert version of WHAT I WANT TO HEAR. After I determine WHAT I wish to hear, I will THEN ASSIGN INSTRUMENTS TO THE NOTES ON THE BASIS OF WHICH INSTRUMENTS CAN PLAY THE NOTES MOST NATURALLY. In assigning these notes I will consider the register (range), rhythm and what instruments are available."
- 21) An example of this process would be:

Ex. #409



In this example I am dealing with three notes that are obviously in the effective NATURAL range of the following instruments:

trumpet	trombone	tenor sax
flugelhorn	alto sax	the flute family
French horn	soprano sax	clarinet

- 22) These notes would or could NOT be played as naturally by bass clarinet, baritone sax, bass trombone, bassoon or tuba.

- 23) The writer is actually **INVENTING HIS OWN VOICINGS** in this approach instead of falling into the trap of constantly using the same prefabricated section voicings over and over.
- 24) To illustrate one aspect of this process we will start with the following four measure melodic phrase, representing **ANY** melodic phrase you might be writing in any arrangement or composition. This would be considered the starting point.

## Ex. #410



- 25) As a second step, I have now decided to treat the melody of the above example in a two-part density. This means that only two different pitches or tones will be played against each other. The tone used against the melody note has, as its source, the **CHORD SYMBOL POSSIBILITIES**, as indicated above the melody line.

## Ex. #411



- 26) The third step would be to assign those instruments to notes of the sketch that create the kind of **SOUND** my ear hears. And these instruments must also qualify in terms of their characteristic qualities in the areas of **REGISTER, RHYTHMIC PROFICIENCY** and **AVAILABILITY**, meaning the instrumentation of the band and the individual instrument's availability at that precise point in the arrangement.
- 27) One possible orchestral solution would be that shown in the following Example 412. In this I have used trumpets, trombones, alto, tenor and baritone saxes. The effect would be a hard, defined sound. The original sketch is arbitrarily augmented by **DOUBLING** the melody an octave lower, adding support to the melody.

## Ex. #412

Trpts 182 3/8

Trbs 182

Alto

Tenor

Baritone

- 28) By orchestrating Example 411 in this fashion, I have used a HARMONIC DENSITY OF TWO DIFFERENT PITCHES OR TONES, AND A SPAN OF ORCHESTRATION OF ONE OCTAVE. These conclusions are of the greatest importance, because when you can DEFINE precisely the factors (in terms of density and span of orchestration) that produce this specific EFFECT, you in turn have the BASIS OF EXACT INFORMATION which enables you to RELATE ANY OTHER combination of DENSITY AND SPAN OF ORCHESTRATION in terms of the EFFECT PRODUCED by the other combinations of DENSITY AND SPAN.
- 29) Now let us examine still another possible orchestral solution to Example 411. In this solution I have arbitrarily doubled the melody line an octave higher, as well as an octave lower. As Example 413 shows, the melody is doubled an octave higher by the flutes, by clarinet in the same register as the original melody, and an octave lower by the trombone. The harmony part is doubled by the flute an octave higher and by the clarinet in the original register.
- 30) The EFFECT produced here is a softer, prettier one. The DENSITY remains two part, while the SPAN OF ORCHESTRATION is now two octaves.

- 31) The flexibility of EFFECT that is possible FROM THE SAME BEGINNING CONCERT SKETCH dramatizes the versatility of this approach and this is the point on which you should be quite clear.

Ex. #413

1st & 3rd open  
2nd & 4th in Harmon

1&2  
3&4

Trpts.

All in cups, Unis.

Trbs.

Flutes

Clars. Col Trpts.

Baritone

- 32) Some of the other important advantages of this approach are:
- THE WHOLE THRUST OF A PHRASE HAS A HORIZONTAL OR LINEAR EFFECT. This allows the arranger to control the *WEIGHT* of the voicing, eliminating saturated voicings that are too heavy to swing, particularly in fast moving rhythmic situations. This is made possible because the choice of harmonic notes under the melody tone are always selected *IN RELATION* to the melody note. This selection is figured from the melody note *DOWN*, or from the melody note *UP*. This is in contrast to a section-writing approach where a melody tone is selected, a bass tone is selected, and then a voicing is chosen that automatically saturates the distance between the melody and bass note.
  - THE DEGREE OF WEIGHT OR SATURATION IS CONTROLLED BY THE NUMBER OF DIFFERENT PITCHES AND DOUBLINGS OF THOSE PITCHES. Consequently, by using either extreme (thin or thick density), THE EFFECT OF TENSION AND CLIMAX CAN HAVE ITS GREATEST CONTRAST TO RELEASE AND SIMPLICITY, AND IT ALLOWS A VERY SENSITIVE ADJUSTMENT TO THE RHYTHMIC CONSIDERATIONS.
- 33) The following chapters covering the various levels of DENSITY and orchestral possibilities should be approached from the standpoint of gaining a working familiarity of the SOURCES of instrumental voicings. The application of these sources in the context of style, effect and flow are covered in Sections V and VI.

**ONE PART DENSITY**

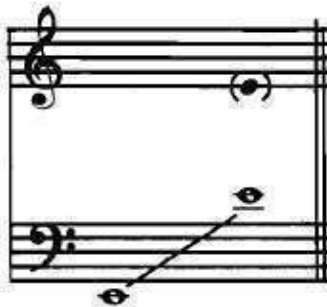
- 34) One part DENSITY is the use of melody or counter melody by itself. Here, of course, there is a total absence of any orchestral harmonic considerations. Because of this, one part density can always provide the solution to situations calling for more rhythmically complex passages. A fast moving jazz line becomes more effective when stated with one part density than when it is burdened with the WEIGHT of harmony. In most cases, this thinking is the most prevalent.
- 35) In summarizing the most natural applications of one part density, we would arrive at the conclusions that it is used:
- 1) To orchestrate a melody or counter melody IN ANY REGISTER.
  - 2) To solve situations that cannot be effectively harmonized.
  - 3) For bass lines that need to be orchestrated as a COUNTERMELODY.
  - 4) For orchestrating COUNTERPUNTAL, LINEAR MELODIC LINES.
  - 5) Handling the bulk of small combo situations.

One of the first problems facing an arranger is HOW TO ORCHESTRATE A ONE PART DENSITY OR MELODIC LINE AND AT THE SAME TIME COMPENSATE FOR THE VARYING RANGES OF INSTRUMENTS WITHIN THE BAND.

- 36) This automatically brings us to SPAN OF ORCHESTRATION. By employing SURROUNDING OCTAVES TO THE ORIGINAL REGISTER OF THE MELODY, we are able to place those instruments which we wish to use IN THEIR MOST NATURAL, EFFECTIVE REGISTERS.
- 37) To clarify just how to determine the NATURAL, EFFECTIVE RANGES for the various instruments, the following examples will specify:
- 1) Five general basic instrument ranges (stated in concert);
  - 2) A listing of those instruments which can be used in each general basic instrument range;
  - 3) Any instrument name, followed by an asterisk and the notation "top" or "bottom", means that specific instrument cannot naturally be written in the entire instrument range given, but instead, is best written in the "top" portion or the "bottom" portion of the range. The final specification can always be determined by checking an instrument's specific range in Chapter 1.
  - 4) Any of the general basic instrument ranges stated can be extended on either end, subject to the specific range of certain instruments.

- 38) The following basic instrument ranges and those instruments that fit the ranges are given below.

Ex. #414



French Horn\* (top)  
Trombone  
Bass Trombone  
Tuba\* (bottom)  
Fender or String Bass  
Guitar

Organ  
Piano  
Bass Clarinet  
Bassoon  
Contra Bass Clarinet  
Bass Sax

#### BASIC INSTRUMENT RANGE NO. 1

THE USE OF THIS INSTRUMENT RANGE PRODUCES EFFECTS WITH THESE CHARACTERISTICS:

Dark color;  
Strong overtones;  
Emotional strength;  
Heavy sound, overbalancing other registers;  
Melodies with rhythmically slower notation.

Ex. #415



Trombone\* (bottom)  
Bass Flute  
Clarinet\* (top)  
Alto Sax  
English Horn\* (top)

Tenor Sax  
Guitar  
Organ  
Piano  
Baritone Sax\* (bottom)

#### BASIC INSTRUMENT RANGE NO. 2

THE USE OF THIS INSTRUMENT RANGE PRODUCES EFFECTS WITH THESE CHARACTERISTICS:

Blends with other registers;  
Has a round, full quality;  
Melodies that are rhythmically flexible.

Ex. #416



Trumpet  
Flugelhorn\* (bottom)  
"C" Flute  
Oboe  
Clarinet  
English Horn  
Soprano Sax

Alto Sax  
Tenor Sax\* (bottom)  
Alto "G" Flute  
Vibraphone  
Xylophone  
Guitar  
Organ  
Piano

#### BASIC INSTRUMENT RANGE NO. 3

THE USE OF THIS INSTRUMENT RANGE PRODUCES EFFECTS WITH THESE CHARACTERISTICS:

Has a light, alive sound;  
Projects bright musical color;  
Stands out clearly over lower harmonic settings;  
Very flexible rhythmic patterns.

Ex. #417



Trumpet  
"C" Flute  
Alto "G" Flute  
Clarinet  
Soprano Sax

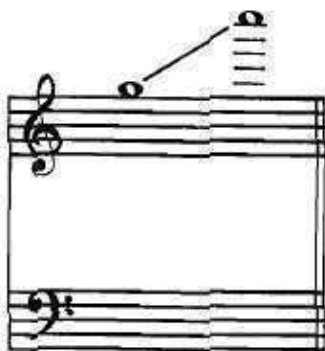
Alto Sax\* (bottom)  
Guitar\* (bottom)  
Vibraphone  
Xylophone  
Organ  
Piano

THE USE OF THIS INSTRUMENT RANGE PRODUCES EFFECTS WITH THESE CHARACTERISTICS:

Lighter sound that must be carefully balanced against overweight of lower register  
Bright orchestral colors;  
Can handle rhythmically complex passages.

#### BASIC INSTRUMENT RANGE NO. 5

Ex. #418



Trumpet\* (bottom)  
Piccolo  
Flute\* (bottom)  
Clarinet\* (bottom)  
Soprano Sax\* (bottom)

Orchestra Bells  
Organ  
Piano

THE USE OF THIS INSTRUMENT RANGE PRODUCES EFFECTS WITH THESE CHARACTERISTICS:

Bright, piercing sound;  
Shimmering orchestral colors;  
Thin timbre compared to other registers;  
Can handle rhythmically complex passages.

- 39) With the above ranges and orchestral breakdown, you now have the means to carefully create any combination of applications of one part density and corresponding spans of orchestration, and to know the general effect generated by the comparative use the various basic, general instrument ranges.



- 40) An example of an actual scored application of these various basic instrument ranges and their orchestral restrictions can be found in the following two measures of my **DIALOGUE FOR TRUMPET, ALTO AND ORCHESTRA**. Example 419 illustrates a four part counterpunctal sketch involving the actual pitches I want to hear.

Ex. #419

The musical score for Example 419 is written in 4/4 time with a key signature of three flats (B-flat, E-flat, A-flat). It consists of two measures. The first measure is marked 'Rubato' and 'f' (forte). The second measure is marked with a double bar line and repeat dots. The score is written on three staves: a treble staff, a middle staff, and a bass staff. The treble staff contains a single melodic line with six notes, each marked with an accent (>). The middle staff contains a single melodic line with six notes, each marked with an accent (>). The bass staff contains a single melodic line with six notes, each marked with an accent (>). The notes in the treble staff are: G4, A4, B4, C5, B4, A4. The notes in the middle staff are: F4, E4, D4, C4, B3, A3. The notes in the bass staff are: G3, F3, E3, D3, C3, B2. The notes in the middle and bass staves are beamed together in pairs.

- 41) With this sketch as a starting point, my next series of decisions has to do with the orchestration of the passage. My instrumentation is:

4 Trumpets  
4 Trombones  
2 French Horns  
2 "C" Flutes  
1 Clarinet  
1 Soprano Sax  
1 Baritone Sax

- 42) The following Example 420 shows the assigning of instruments that orchestrate the sketch shown in Example 420.



## Ex. #420

SC

This musical score is for the piece "The Rose Tree" and includes parts for the following instruments:

- 1&2 Flutes**: Treble clef, 4/4 time signature. Starts with a *f* dynamic.
- Soprano Sax**: Treble clef, 4/4 time signature. Starts with a *f* dynamic.
- Clar.**: Treble clef, 4/4 time signature. Part is marked "col Soprano Sax".
- Baritone Sax**: Treble clef, 4/4 time signature. Part is mostly rests.
- 1&2 Trpts.**: Treble clef, 4/4 time signature. Starts with a *f* dynamic.
- 3&4 Trpts.**: Treble clef, 4/4 time signature. Starts with a *f* dynamic.
- 1&2 Fr. Horn**: Treble clef, 4/4 time signature. Starts with a *f* dynamic.
- 1&2 Trbs.**: Bass clef, 4/4 time signature. Starts with a *f* dynamic.
- 3&4 Trbs.**: Bass clef, 4/4 time signature. Starts with a *f* dynamic.

The score is marked "Rubato" at the top. The key signature has two flats (B-flat and E-flat). The piece concludes with a double bar line and repeat dots (//).

- 43) Compare my orchestration in Example 420 to the preceding basic instrument ranges and draw conclusions in each instance.

### **BASIC TECHNIQUES**

- 44) This section of the book will discuss many processes that are essential basic steps in the problems of voicing and orchestration.
- 45) To emphasize and give proper value to these steps, they will be presented under the heading of BASIC TECHNIQUES.
- 46) You should never lose sight of these processes as you continue to absorb more advanced and sophisticated procedures and possibilities. **THEY ARE THE SOLID CORE UNDERNEATH THE FINISHED PRODUCTS AND EFFECTS.**

#### **BASIC TECHNIQUE NO. 1**

##### **INTERPRETING PRIMARY THEMATIC MATERIALS**

- 47) The actual process an arranger experiences starts first with the decision of how to interpret his primary thematic material. If (and this is subject to the style of the composition and arrangement and to the arranger's musical taste) the logical solution is to utilize **ONE PART DENSITY** and one degree or another of the **SPAN OF ORCHESTRATION**, THEN he should breakdown and determine the factors involved in this order:

#### **EFFECT:**

- a) Degree of weight (number of instruments).
  - b) Register or registers (span of instrumentation).
  - c) Based on the concert sketch and the above conclusions, which specific instruments should be assigned notes from the sketch.
- 48) When orchestrating the sketch, the characteristic instruments listed with each of the preceding **BASIC INSTRUMENT RANGES** should be considered for your own specific situation within the boundaries of the instrumentation available. **WHEN DETERMINING THE SPAN OF ORCHESTRATION, REMEMBER THAT THE MOST EFFECTIVE DOUBLINGS (INTO OTHER REGISTERS) OCCUR WHEN USING ADJACENT OCTAVES.**

- 49) Most beginning or inexperienced arrangers underestimate the huge **POTENTIAL** of **ONE PART DENSITY** and its accompanying **SPAN OF ORCHESTRATION** variations. By this I mean that in making a decision as to how to handle a specific situation, they will abuse **HARMONIC** solutions, resulting in the neglect of the completely valid possibilities we have just discussed . . . **ONE PART DENSITY**.
- 50) By being aware of the additional orchestral variations possible by means of **MIXED SECTIONS**, **MUTES** (different musical colors) and **PERCUSSIVE POSSIBILITIES** (bells, vibes, etc.) we can, many times, arrive at an ideal solution . . . namely, one part density (with various spans of orchestration) made interesting and colorful by the use of the orchestral variations named above.

#### BASIC TECHNIQUE NO. 2

##### DIVIDING THE BAND INTO TWO SMALLER ENSEMBLES

- 51) A variation of application of **ONE PART DENSITY** involves conceiving a unison (one part density) or octave statement for a phrase or section of the composition or arrangement. Approximately half of the horns are used to orchestrate this line.
- 52) A second thematic line is orchestrated with the remaining half of the available horns.
- 53) The reason for planning out the **DIVISION** of the instruments and applying them accordingly is to be able to use an **OVERLAP** between the two lines.
- 54) Although a two part density may occur at some point where the two lines come together, the primary impact of the approach remains one part density.

- 55) To illustrate this concept, the following example represents the theme of a composition in its original form:

Ex. #421

##### LEADSHEET OF POOR BOY

m.m. ♩ = 120

SC

### BASIC TECHNIQUE NO. 3 MELODIC OVERLAP

- 56) This example of the lead sheet from POOR BOY is a typical jazz melodic lead. With this as a STARTING POINT, ANY NEW PHRASE OF THE MELODY CAN BE USED TO APPLY THE OVERLAP.
- 57) Reference letters W, X and Y in this example are places where a NEW PHRASE begins.
- 58) The OVERLAP is created by:
- 1) Sustaining the last note of the phrase while the new phrase begins independently.
  - 2) Continuing the SUSTAINED last note of the previous phrase WITH THE OPTION OF CONTINUING A MELODIC IDEA TO PLAY COUNTER TO THE NEW PHRASE.
  - 3) When this continuation is applied, the RHYTHMIC figures used should be quite uncomplicated so as NOT to draw excessive attention from the main melodic idea.
- 59) The next example, 422, shows the implementing of the OVERLAP to the POOR BOY theme.
- 60) Reference letter W is the first overlap. The new phrase (starting on the second beat of the measure) begins as a NEW ENTRANCE, while the last note (F) of the previous phrase is held five beats.
- 61) Although we will discuss the overall general applications of the OVERLAP technique in Chapter 20, it is necessary to be aware of these characteristics of the OVERLAP EFFECT:
- 1) It provides the effect of SETTING UP a NEW ENTRANCE.
  - 2) It creates a FLOW to an arrangement, avoiding the trap of CHOPPY, IMMATURE phrasing.
  - 3) It adds INTEREST to a thematic statement by the creation of a SECOND melodic idea.
  - 4) It builds momentum by going from ONE melodic line into TWO melodic lines.

## Ex. #422

## FIRST SKETCH OF POOR BOY

The musical score consists of three systems of staves, each with a treble and bass staff. The first system shows a melody in the treble staff starting at point (A) and ending at point (B). A wavy line labeled 'Dr. Fill' is in the bass staff. A box labeled 'W' with an 'overlap' arrow indicates a transition. The second system continues the melody, with a box labeled 'X' and an 'overlap' arrow. The third system shows a more complex arrangement with a 'Dr. Fill' wavy line, a box labeled 'Y', a box labeled 'Z', a box labeled '2 Part Density' with a double arrow, and a box labeled 'SC' at the end. Various musical notations like slurs, ties, and dynamic markings (f) are present.

- 62) Reference letter **X** shows the second OVERLAP. On this third phrase of the original melody, the NEW ENTRANCE goes back to the top line. This could, however, be orchestrated by a THIRD or FOURTH (etc.) group of instruments or sections. In this example, I have confined the thematic breakdown to only two groups of instruments. The example at reference point **X** shows how the sustained last note of the phrase (F) has been EXTENDED with new notes and a simple sustained rhythm until it connects into the next new phrase, shown at reference point **Y**.

- 63) You should draw these conclusions from Examples 421 and 422 regarding the application of the overlap technique:
- 1) *Overlaps can occur at a NEW PHRASE in the melody. This can be a matter of taste as to where a new phrase starts. However, most new phrases will be obvious.*
  - 2) *The last note of a phrase can simply be sustained for a long enough time to effect TWO melodies going at the same time (reference letter **W**) or it can be extended and added to until it connects with the next new phrase (reference letter **X** to **Y**).*
  - 3) *Reference letter **Z** pertains to TWO PART DENSITY. In this instance it allows the treatment to END THE THEMATIC LINE, thus creating the effect of "capping" the entire section of the chart. The two part density measure is "heavier" because of the "weight" of the two parts, thus effecting the ending of the melodic section quite naturally.*

### ORCHESTRATION OF THE DIVIDED BAND

- 64) With the division of the thematic line into two entities, we obviously cannot assign the same instruments to play everything. It is at this point that you should think in terms of two bands from within the ensemble.
- 65) Assigning the instruments should be determined through this process:
- 1) *Review BASIC TECHNIQUE NO. 1 and all its implications. They are all valid in this situation.*
  - 2) *Although all the points in BASIC TECHNIQUE NO. 1 apply, an added dimension should be considered. ANY JUDGMENT PERTAINING TO ORCHESTRATION MUST BE COUNTERED BY AN AWARENESS OF WHAT HAS PRECEDED THE SECTION OF THE ARRANGEMENT YOU ARE WRITING, AND THE POSSIBILITIES OF THE SECTION THAT WILL FOLLOW.*
- 66) In the first sketch of the POOR BOY chart, I will use one group of instruments and designate them the (A) group and the second group of instruments as the (B) group.
- 67) Although I have the freedom to make one group heavier or lighter than the other, or as equal as possible in register, it is important to use approximately the SAME NUMBER OF INSTRUMENTS IN EACH GROUP.
- 68) This thinking would be valid even if, in a more complicated situation, I had split the ensemble into three or four different independent groups (i.e., (C) group, (D) group, etc.)
- 69) A critical decision regarding the orchestration of divided bands involves the point of HOW YOU DIVIDE the instruments. If horns of one instrument family (trumpets, saxes, woodwinds, trombones) are assigned to each group of instruments, a more conventional effect is produced. If horns from all instrument families are assigned to one group, the mixed timbres of the instruments produce a more orchestral effect.
- 70) The following table illustrates the possible divisions of balance in a typical band consisting of four trumpets, four trombones and five saxes (see column 1, 3, and 5 in Table 14). The odd or extra instrument that results from dividing the thirteen horns into two, three or four instrument groups is added to the TOP PITCHED group to help compensate for the lesser weight of the higher pitched instruments such as the woodwinds or muted trumpets as opposed to the heavier saxophones and low brass.

**TABLE 14**

		TWO GROUPS		THREE GROUPS		FOUR GROUPS	
Total Instruments in Group		13 horns	18 horns	13 horns	18 horns	13 horns	18 horns
Number of Instruments To Each Group (Numbers in Parentheses Indicate Options)	a)	seven	nine	five	six (7)	four	five
	b)	six	nine	four	six (6)	three	five
				c) four	six (5)	three	four
						d) three	four
		Column 1	2	3	4	5	6

- 71) The dotted line connecting the top row of instruments in each grouping is to indicate the ADDITION OF THE EXTRA HORN TO THE TOP PITCHED GROUP TO ATTAIN A BETTER BALANCE BETWEEN THE OVERALL DIVISIONS.
- 72) This same reasoning, which solved the problem of where to put an extra instrument to attain the best balance, also can be used for larger bands (18 horns for example: 5 trumpets, 5 trombones, divisi French horns, 5 saxes and percussion) (see Columns 2, 4 and 6) or situations where fewer instruments are available. It suffices to say that because you will ALWAYS be adjusting to AVAILABLE INSTRUMENTATION, each division of instruments must be solved independently.
- 73) Many times, fewer instruments will be available because of:
- 1) Solos on an instrument within a section.
  - 2) A brass instrument made tacit to allow time to change to a mute or to remove a mute.
  - 3) A sax or woodwind instrument made tacit to allow time to change to a double (sax to woodwind, woodwind to sax, etc.).

#### SUMMATION OF ORCHESTRAL POSSIBILITIES APPLIED TO ONE PART DENSITY

- 74) At this point I have combined the information covered in this chapter concerning these points:
- 1) One part density.
  - 2) Span of orchestration from PRIME UNISON to five octaves.
  - 3) Basic, general INSTRUMENT RANGES for all instruments.
- 75) To clarify this, I have written examples of a three note motif stated first in six registers (illustrations 1 through 6). These six illustrations all pertain to one part density with zero (prime unison) span of orchestration.
- 76) Illustrations 7 through 11 pertain to an OCTAVE COUPLING showing the three note motif in all possible combinations through the six registers. Each Illustration (7 through 11) shows each combination of ADJACENT OCTAVES.
- 77) Illustrations 12 through 15 pertain to DOUBLE OCTAVE COUPLINGS showing the three note motif in all possible combinations through the six registers. Each Illustration (12 through 15) shows each combination of ADJACENT OCTAVES.



TABLE 15

**SPAN-0**

*8va* *loco*

1 2 3 4 5 6

**SPAN-1** **SPAN-2**

7 8 9 10 11 12

**SPAN-3**

13 14 15 16 17 18

**SPAN-4** **SPAN-5**

19 20 21



- 78) Illustrations 16 to 18 pertain to TRIPLE OCTAVE COUPLINGS showing the three note motif in its three possible combinations through the six registers. Each Illustration (16 to 18) shows each combination of ADJACENT OCTAVES.
- 79) Illustrations 19 and 20 pertain to QUADRUPLE OCTAVE COUPLINGS showing the three note motif in its two possible combinations spanning the six registers. They are all ADJACENT OCTAVES.
- 79a) Illustration 21 pertains to a QUINTUPLE OCTAVE COUPLING showing the three note motif in its one possible combination spanning the six registers. They are all adjacent octaves.

TABLE 16

	SPAN.	Illus. No.	ABBREVIATION OF INSTRUMENTS:
a	0	1	picc., c fl., o. bl., org., pno.
b		2	tp., c fl., ob., cl., sop. sx., xylo., vib., o. bl., org., pno.
c		3	tp., flhn., f.h., c fl., al. fl., b. fl., ob., cl., e.h., b. cl., bsn., sop. sx., al. sx., ten., xylo., vib., org., pno., gtr.
d		4	flhn., f.h., t. tb., b. tb., al. fl., b. fl., cl., b. cl., bsn., sop., al., ten., by., xylo., vib., org., pno., gtr.
e		5	t. tb., b. tb., tu., b. cl., bsn., c. b. cl., ten., by., b. sx., org., pno., gtr., ba., tymp.
f	↓	6	B. trb., tu., c. b. cl., b. sx., org., pno., ba.
g	1	7	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 1 and 2
h		8	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 2 and 3
i		9	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 3 and 4
j		10	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 4 and 5
k	↓	11	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 5 and 6
l	2	12	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 1, 2 and 3
m		13	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 2, 3 and 4
n		14	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 3, 4 and 5
o	↓	15	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 4, 5 and 6
p	3	16	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 1, 2, 3 and 4
q		17	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 2, 3, 4 and 5
r	↓	18	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 3, 4, 5 and 6
s	4	19	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 1, 2, 3, 4 and 5
t	↓	20	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 2, 3, 4, 5 and 6
u	5	21	COMBINE INSTRUMENTS LISTED IN ILLUS. NO.: 1, 2, 3, 4, 5 and 6

- 80) To define those instruments whose effective ranges allow them to play the three note motif shown in the twenty-one illustrations, I have designated an abbreviation for each instrument. The following Table 17 can be used as a guide for these abbreviations.

TABLE 17

tp	— trumpet	ob	— oboe	b. sx	— bass sax
flhn	— flugelhorn	cl	— clarinet	xylo	— xylophone
f.h.	— French horn	e.h.	— English horn	vib	— vibraphone
t.tb	— tenor trombone	b. cl.	— bass clarinet	o. bl	— orch. bells
b.tb	— bass trombone	bsn	— bassoon	org.	— organ
tu	— tuba	c.b. cl	— contra bass clar.	pno	— piano
picc	— piccolo	sop.	— soprano sax	gtr.	— guitar
c fl	— "C" flute	al	— alto sax	ba.	— bass
al. fl	— alto "G" flute	ten	— tenor sax	tymp.	— tympani
b. fl	— bass flute	by	— bary sax		

- 81) Table 16 lists the twenty-one illustrations of the three note motif in order of their spans of orchestration; and the particular instruments that could play each of the illustrations.
- 82) The left column in Table 16 contains reference letters from "a" to "u" for each row of the Table. The various spans of orchestration are coordinated with Table 15 in the next column. The following column coordinates with the illustration numbers from Table 15.
- 83) In line with each of the illustration numbers are listed the instrument abbreviations as defined in Table 17.
- 84) For example, in row "a", the abbreviations picc. (piccolo), c fl. ("C" flute), o. bl. (orch. bells), org. (organ) and pno. (piano) indicate that those instruments all have the proper range to play the notes in Illustration 1. The same procedure determines the names of the instruments that could play Illustrations 2 through 6.
- 85) These six illustration numbers actually cover the gamut of REGISTER POSSIBILITIES.
- 86) Illustrations 7 through 11 are combinations of TWO ADJACENT REGISTERS as originally shown in Illustrations 1 through 6. Therefore, those instruments that could play Illustrations 7 through 11 can be determined by combining the names of the instruments listed in Illustrations 1 through 6.
- 87) Illustrations involving 2, 3, 4 and 5 octave spans of orchestration necessitate combining instruments abbreviations stated in the FIRST SIX ILLUSTRATIONS.

- 88) For example, in row "r," we are concerned with Illustration 18 showing four registers spanning three octaves.

Ex. #423

III. 18



ALL INSTRUMENTS (ABBREVIATIONS LISTED IN ILLUSTRATION 3) COULD PLAY:

ALL INSTRUMENTS (ABBREVIATIONS LISTED IN ILLUSTRATION 4) COULD PLAY:

ALL INSTRUMENTS (ABBREVIATIONS LISTED IN ILLUSTRATION 5) COULD PLAY:

ALL INSTRUMENTS (ABBREVIATIONS LISTED IN ILLUSTRATION 6) COULD PLAY:

Ex. #424



Ex. #424a



Ex. #424b



Ex. #424c



- 89) Table 16 can be read in the same manner to determine all the remaining combinations of instruments from the various illustrations referred to in Table 15.
- 90) All the orchestral possibilities shown in Tables 15 and 16 are derived from the basic, general INSTRUMENT RANGES originally shown in this chapter.
- 91) I have classified and illustrated the immense number of orchestral combinations based on ONE PART DENSITY and the various SPANS OF ORCHESTRATION to impress you with the scope and potential inherent in just this one area of the DENSITY CONCEPT.
- 92) As we study the remaining levels of DENSITY you should always consider this first level of DENSITY ON A PAR WITH ALL OTHERS. ONE PART DENSITY is valid in its own right AND in combination with any other level of DENSITY.



## SECTION IV — DENSITY

### Chapter 13: Two Part Density

- 1) Two part density is the first level of density involving the selection of an additional pitch to be playing AGAINST a melody note.

THE SOURCES OF THE second voice are:

- 1) Melodic couplings;
  - 2) A repeated or sustained commontone or chord tone;
  - 3) Harmonic definition (Intervals);
  - 4) Counterpuntal melodies.
- 2) The key to this SELECTION is that the second tone can be thought of in relationship to the melody note. There are three approaches to determining this second tone.

#### BASIC TECHNIQUE NO. 4

##### MELODIC COUPLINGS

- 3) The first approach is the use of MELODIC COUPLINGS. A melody is a horizontal, linear succession of tones that define the character, style (and with the additional dimension of rhythm), the motion of the arrangement or composition. The melody consequently sets the primary aspects of style and effect in relation to the overall arrangement.
- 4) By employing MELODIC COUPLINGS we are able to retain the importance and character of the melody, and in a way that does not detract even though we are introducing a second pitch for the listener to digest.
- 5) The characteristics of a MELODIC COUPLING are that it:

- a) Follows the contour of the melody;
- b) Can be above or below the melody;

Typical intervals are:      Octave;  
    Diatonic Thirds;  
    Diatonic Sixths.

Less used intervals are:      Perfect Fourths and Fifths;  
    Seconds and Sevenths.

- 6) In each of the above cases the particular interval or chord form is figured either above or below a melody note. All the examples in Table 15 (Illustrations 7 through 21) are considered octave couplings. The following examples show other intervallic applications of MELODIC COUPLING POSSIBILITIES:

Ex. #425



SC

Ex. #426



SC

Ex. #427



SC

Ex. #428



SC

Ex. #429



SC

Example 425 states the original melody.

Example 426 uses a Melodic Coupling a diatonic third below the melody.

Example 427 uses a Melodic Coupling a perfect fourth below the melody.

Example 428 uses Melodic Couplings an octave above and a diatonic sixth below the melody.

Example 429 uses Melodic Couplings an octave above and a diatonic sixth above the original melody.

- 7) The number of individual instruments assigned to any of these examples does not change the **DENSITY** factor. However, the more instruments used, the more orchestral weight is added to the music. This is always a factor to keep in mind.
- 8) The last two examples above also illustrate the change in the **SPAN OF ORCHESTRATION**: Example 428 is now an octave and a half span, Example 429 is a span of one octave.
- 9) The orchestration of any of these examples would follow the same range of possibilities as outlined in Chapter 12.

### BASIC TECHNIQUE NO. 5 REPEATED CHORD TONES AGAINST THE MELODY

- 10) A second approach to applying Two Part Density to a given melodic phrase is the use of a **REPEATED OR SUSTAINED COMMON TONE OR CHORD TONE**.
- 11) When used against the melody, they produce the Two Part Density effect and at the same time create **VARYING INTERVAL RELATIONSHIPS** with each moving melody note. Example 430 states an original melodic phrase.

SC

Ex. #430



- 12) The following example has now added the second or harmony tone, in this case, above the melody. The added **Ab** can be seen as a **CHORD TONE** (the root of the chord), and functioning as a **REPEATED NOTE**; i.e., the repeated note can be played with the exact rhythm of the original melody. Notice that in choosing the **Ab**, I have stayed in a part of the chord **THAT THE MOVING MELODY DOES NOT TOUCH**. Because of this, it remains Two Part Density for the entire phrase.

SC

Ex. #431



- 13) To illustrate the versatility of Two Part Density, compare the following concert orchestration of Example 432 to Example 431.

Ex. #432

SC

The musical score for Example 432 is written in 3/8 time and consists of four staves. The top two staves are for Trpts. 1&2 (Trumpets 1 and 2) and Trbs. 3&4 (Trumpets 3 and 4). The bottom two staves are for Saxes (Saxes) and T&B (Tenor and Bass). The music features a strong ensemble sound with doubling of instruments. The notation includes various note values, rests, and dynamic markings.

- 14) The strong ensemble sound this orchestration produces is another example of the added dimension of the DOUBLING OF INSTRUMENTS, or the WEIGHT. The point to remember is that this TWO PART DENSITY ROCK OR JAZZ ENSEMBLE VOICING is just as valid as a rock or jazz ensemble voicing assigning DIFFERENT PITCHES to six, seven or eight of the instruments. This example of TWO PART DENSITY, therefore, doubles more instruments on one of the pitches. The more different pitches involved, the fewer the number of instruments that may be doubled on each pitch.

#### BIG BAND APPLICATIONS OF TWO PART DENSITY

- 15) Two Part Density, orchestrated for big bands, automatically produces a more unconventional, unique effect. The absence of SATURATED sheets of harmony produces a freshness of sound. The contrast between the leanness of One and Two Party Density and full saturated voicing provides a controlled variation of effect.



- 16) The combinations of instruments that can DOUBLE any two part density sketch of a melodic phrase are as varied as the number of instruments available. The same orchestral possibilities listed in Table 15 apply equally to two part density as they do to one part.
- 17) Review Example 432 and note how the trumpet section has been "paired off;" also the saxes and trombones. Also relate the orchestration to the doublings of the original melodic phrase (Example 430), and follow the way the "new registers" have been added to achieve the doubling effect.
- 18) The added ORCHESTRAL WEIGHT of more and more instruments, doubling and redoubling the two part density simply builds strength and dimension. But it does not sacrifice flexibility, cleanness and a unique quality.
- 19) When searching out your possibilities for orchestrating a sketch using two part density, refer to Tables 15 and 16. As these Tables apply to two part as well as one part density, they are not repeated here, but should be referred to when necessary.

#### BASIC TECHNIQUE NO. 6

##### INTERVALS

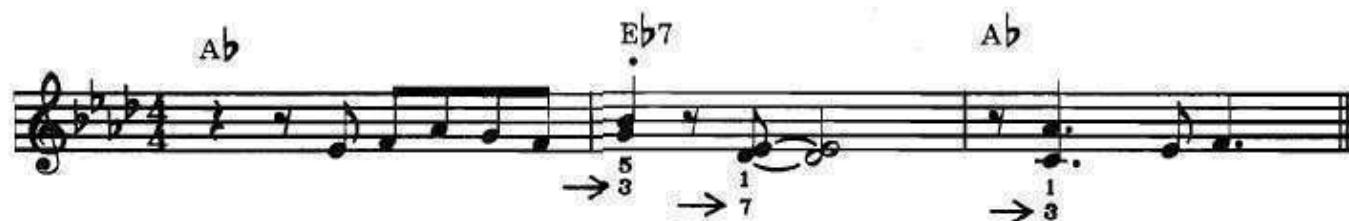
- 20) A third and very practical approach to applying Two Part Density to a given melodic phrase is by harmonic definition. This entails choosing VARYING INTERVALS in relationship to any specific melody note.
- 21) The principal responsibility of this added tone is to DEFINE THE HARMONIZATION ASSIGNED TO A SEGMENT OF THE MELODY.
- 22) To facilitate this HARMONIC DEFINITION, certain considerations remain constant. They are:
  - 1) Use of the root, 3rd, 5th and/or 7th of the basic chord, including any normal alteration of the 3rd, 5th and 7th. (See Example 433.)
  - 2) The 3rd and 7th of any chord DEFINES a chord structure stronger than the root or 5th. (See Example 434.)
  - 3) The use of DIATONIC 3rd or 6th intervals will produce consonant chordal effects. (See Example 435.)
  - 4) The use of DIATONIC 4th and 5th will produce a more hollow chordal effect. 2nds and 7ths will produce varying degrees of a more dissonant effect. (See Example 436.)



Ex. #433



Ex. #434



Ex. #435



Ex. #436



- 23) The above four points, used literally, can of course produce any number of two part densities. However, it is essential NOT to select these harmony tones mechanically. Instead, all second lines should be selected by "hearing" the melodic value of the line (preferably by singing the line to yourself) to achieve a melodically interesting second part.

### COUNTERPOINT

- 24) A logical approach to two part density is that of counterpointal interplay between the two voices. Counterpoint, as stated previously, is really two melodies played simultaneously. This has been covered in Section II, Chapter 6.
- 25) The orchestration of the two voices has the same range of possibilities as any two part writing. However, the division of a band into smaller groups of instruments playing each voice can create some problems in special handling. Review all the text pertaining to this in Chapter 12, Paragraphs 64 to 73.

### ORCHESTRATION OF TWO PART DENSITY

- 26) Two part density suggests many natural orchestral possibilities. The most obvious are small group situations such as Rhythm Section and:

Trumpet and/or Alto/Tenor/Bary	Tenor Trombone	Trombone Bary Sx.	Flute Clar.	Trumpet and/or Flute/Oboe
Trumpet Clarinet	Alto Tenor	Tenor Bary Sx.	Flute and/or Vibes/Guitar	

AND RHYTHM SECTION PLUS ANY PAIRING OF THE SAME INSTRUMENT:

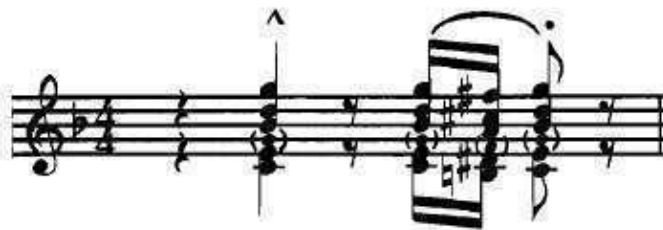
Two Flutes; Two Tenor saxes, etc.

- 27) Big band orchestration achieved by the division of the band into two segments, one grouping to each voice. (Review Table 14.)
- 28) All of these instrument possibilities are CONVENTIONAL APPLICATIONS of DENSITY for combos, small and large ensembles. Any two of the groupings in Paragraph 26 can be combined into a four horn instrumentation, functioning still as a combo or small ensemble. Using four horns, the two part density still is the principal source of MELODIC AND RHYTHMIC FLEXIBILITY. The difference now is that you use TWO HORNS doubling each other on each pitch instead of only one. The result is more of an orchestral sound and overall blend.

**ARRANGING ROCK MUSIC FOR RECORDS**

- 29) Another important aspect of two part density is in the area of arranging contemporary rock music, specifically for records.
- 30) For example, a typical horn instrumentation for a record date might be:
- 2 Trumpets (doubling flugelhorn)
  - 2 Trombones
  - 2 Saxes (doubling woodwinds)
  - (plus rhythm section, strings)
- 31) These six horns could be written using:
- \* six different pitches, or
  - \* five different pitches with one note doubled, or
  - \* four different pitches with two notes doubled, or
  - \* three different pitches with three notes doubled, or
- TWO DIFFERENT PITCHES with both notes doubled three times, or
- ONE PITCH with all instruments doubling that pitch.
- 32) The maximum degree of MELODIC AND RHYTHMIC FLEXIBILITY will be found in those combinations using ONE and TWO DIFFERENT PITCHES.
- 33) The remaining possibilities (indicated with \*) have less and less melodic and rhythmic latitude. Instead of melodic and rhythmic flexibility, these combinations (\*) have their value when used as BACKGROUND FIGURES (see Ex. 437) and as SUSTAINED "PADS" of harmony.

Ex. #437



Ex. #438



(ALL NOTES IN PARENTHESES ARE DOUBLED TONES)

- 34) Where two part density assumes an importance in recording is in the fact that when recording contemporary music, the **BALANCE** of the horns can be controlled by the microphones. Consequently two trumpets in unison can have the fullness of five trumpets in unison, and this is made possible by the engineer raising the trumpet level, adding echo, etc.
- 35) Smaller ensembles are more in character with the rock idiom because the groups that create the material and styles ARE smaller than big bands, and their concept places the emphasis on melody and the **RHYTHM SECTION PRIMARILY**. Larger numbers of horns in actuality diffuse and tend to blot out the rhythm section. Small groups of horns, an emphasis on rhythm, amplification and concept – these idiomatic considerations all make one and two part density essential to the jazz/rock arranger.
- 36) In many instances, a big band, or big band concept would be useless or even wrong in a rock-styled approach for record writing. What is even more dangerous is for an arranger to try to write for two, four or even six horns, **THINKING BIG BAND VOICINGS** and “adjusting” them to two, four or six horns. Instead, an arranger should deal with small groups of horns with approaches that are tailormade for just such instrumentation. Our discussions covering one and two part density provide just the tailormade approach that is needed, and the value of one and two part density in this context should be very clear to you.
- 37) You will see as we progress through the ramifications of one to eight parts density, that each level of density is **NOT** an isolated technique. The essential premise is that **AS LONG AS EACH INSTRUMENT INVOLVED HAS A CONTINUOUS, LOGICAL PART, THE VERTICAL DENSITY AT ANY ONE POINT CAN CHANGE FROM ANY LEVEL OF DENSITY TO ANY OTHER LEVEL**.
- 38) The **REASON** for this variation of density is to give the arranger still another dimension of control. This control allows the arranger to **CREATE AN ASCENDING OR DESCENDING CONTOUR TO THE SPAN OF ORCHESTRATION, TO A GREATER OR LESSER DEGREE, AS DESIRED**.
- 39) This becomes more dramatic when all eight levels of density are at our fingertips. At this point, when we have only discussed two levels of density (one and two part density) the effect is not, of course, as dramatic. However, the point is to establish the **EXISTENCE** of this variation and to begin the study of the possibilities at the simplest and easiest level of *comprehension*.
- 40) The following example of **MIXING ONE AND TWO PART DENSITY** should be quite obvious. The determining factor of **WHERE** and **WHY** one part density should change to two part is strictly an intuitive matter of:
  - 1) **STYLE**
  - 2) **EAR**
  - 3) **EFFECT** (sudden introduction of an additional note)
  - 4) **VARIATION**

- 41) In analyzing this example, relate the above four points to each instance of CHANGE FROM ONE TO TWO, AND TWO TO ONE PARTS OF DENSITY.

SC

Ex. # 439

**"SCUFFLE"**

The musical score for "SCUFFLE" is written for two staves. The top staff is for Flute/Clarinet (Flt./Clar.) and the bottom staff is for 2 Trumpets (2 Trpts.) and 2 Trombones/Guitar (2 Trbs./Gtr.). The key signature is B-flat major (two flats). The score consists of 31 measures, numbered (24) through (31). The harmonic progression is as follows:

- Measure (24): A-flat major (A $\flat$ )
- Measure (25): E-flat 7 (E $\flat$ 7)
- Measure (26): A-flat major (A $\flat$ )
- Measure (27): A-flat major (A $\flat$ )
- Measure (28): E-flat 7 (E $\flat$ 7)
- Measure (29): A-flat major (A $\flat$ )
- Measure (30): A-flat major (A $\flat$ )
- Measure (31): E-flat 7 (E $\flat$ 7)

A bracket labeled "3 part" is placed under the bottom staff, spanning measures (29) through (31).

## SECTION IV – DENSITY

### Chapter 14: Three Part Density

- 1) Three part density introduces the first application of chords. The vertical uses of chordal structures can be a large and confusing world. By discussing and breaking down the chord structure possibilities in terms of 3, 4, 5, 6 and 7 and 8 levels of density, we can organize the various possibilities in such a way as to insure complete facility.
- 2) Three part density is three different pitches used simultaneously. Before we can involve ourselves with the orchestral combinations of three part density, it is necessary to know the *SOURCES of these three pitches*. Understanding these different *SOURCES* gives the arranger the sensitivity to know the best source to draw upon in any specific style of music.

#### THE SOURCES ARE:

- 1) Implying 4, 5, 6 and 7 part harmony with three pitches.
- 2) Triads
- 3) Fourth structures (open and closed positions).

### IMPLYING 4, 5, 6 and 7 PART HARMONY

#### WITH THREE PITCHES

- 3) The premise of implying a larger harmony with fewer notes is based on determining which notes should be omitted.
- 4) The essence of this concept is the basic chord tones (1, 3, 5) from which all larger chord structures are built. The means by which we imply a larger harmony is the use of **SUBSTITUTION NOTES**.
- 5) Substitution notes are predicated on the relationship between the root, third and fifth of a chord, and the upper extensions of the chord (i.e., the 6th, 7th, 9th, 11th and 13th).
- 6) A chord symbol defines the basic chord, which in turn determines the actual notes that are the root, third and fifth. From this starting point, the relationship is:

## BASIC TECHNIQUE NO. 7

## SUBSTITUTION NOTES

- 7) The 6th of a chord can be used in place of the 5th. This is notated 6/5, meaning the 6th is used IN PLACE of the original 5th of the chord.
  - 8) The major (7) or minor 7th (<sup>b</sup>7) of a chord can be used in place of the 5th. This is notated 7/5 – meaning the 7th is used IN PLACE OF the original 5th of the chord. The 7th of a chord can be used in place of the root. This is notated 7/1, meaning the 7th is used IN PLACE OF the original root of the chord.
  - 9) The 9th, <sup>b</sup>9th or +9th of a chord can be used in place of the root. This is notated 9/1, <sup>b</sup>9/1 or +9/1, meaning the 9th is used IN PLACE OF the original root of the chord.
  - 10) The 11th or aug. 11th of a chord can be used in place of the 3rd. This is notated 11/3 or +11/3, meaning the 11th is used IN PLACE OF the original 3rd of the chord.
  - 11) The 13th or <sup>b</sup>13th of a chord can be used in place of the 5th. This is notated 13/5 or <sup>b</sup>13/5, meaning the 13th is used IN PLACE OF the original 5th of the chord.
- 12) This basic approach enables you to harmonize, in three part density, ANY MELODY NOTE THAT IS NOT THE ROOT, THIRD OR FIFTH OF A CHORD.
  - 13) The following Example 440 represents a melody lead sheet that we would want to harmonize in three part density. Following Basic Technique No. 7 to determine our SUBSTITUTION POSSIBILITIES, WE COULD ARRIVE AT THE SOLUTION as shown in Example 441.

SC

Ex. #440



## Ex. #441

Example #441 is a musical staff in 4/4 time. It shows a sequence of chords and resolutions. The chords are: F, D7 (with a 4/3 interval),  $\flat 9/1$ , Gmi (with a 11/3 interval), and C7 (with a 13/5 interval). The word "RESOL." is written above the staff between the D7 and  $\flat 9/1$  chords, and between the Gmi and C7 chords. A bracket with the number "3" is placed under the first three chords (F, D7,  $\flat 9/1$ ). A box labeled "SC" is positioned above the staff between the D7 and  $\flat 9/1$  chords.

- 14) Each substitution note has a **NATURAL RESOLUTION** to the closest chord tone below (or the note originally omitted). When a substitution occurs in the melody, that **SUBSTITUTION NOTE CAN BE RESOLVED TO CREATE MOTION AND MELODIC INTEREST.**
- 15) In the following example, a substitution of 13/5 and 9/1 has been used. (See Example 442.) In Example 443 the 13/5 substitution has resolved first to a  $\flat 13/5$  substitution, then to the note originally omitted, the 5th. In the second measure, the 9/1 has resolved to the root of the chord.

Example #442 shows two measures of music. The first measure has a chord labeled  $13/5$  above and (C7) below. The second measure has a chord labeled  $9/1$  above and (F) below. A box labeled "SC" is positioned above the staff between the two measures.

Example #443 shows two measures of music. The first measure has a chord labeled  $13/5$  above and (C7) below. The second measure has a chord labeled  $\flat 13/5$  above and (F) below. The word "RESOL." is written above the staff between the two measures. A box labeled "SC" is positioned above the staff between the two measures.

- 16) When a substitution occurs in an inner voice, the resolution can be arbitrarily made, adding motion in the inner voices.
- 17) When developing a background melody line from a chord progression, arbitrary use of the **SUBSTITUTION AND RESOLUTION WILL ADD INTEREST** and motion to the background melody.



## BASIC TECHNIQUE NO. 8

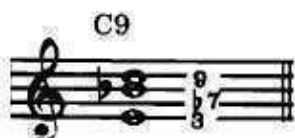
## SPECIAL SITUATIONS (S.S.)

- 18) In some situations, certain SUPPORTIVE FUNCTIONS of the chord should be used. They are:

## SPECIAL SITUATION NO. 1

All 9ths in the melody of a Dominant 9th chord should be supported with the 7th and 3rd of the chord (see Example 444a). This also applies to the dom. 7th (b9) (see Example 444b) and the dom. 7th (+9) (Example 444c) when the altered 9th is in the melody.

Ex. #444a



Ex. #444b



Ex. #444c



## SPECIAL SITUATION NO. 2

The +11th or 11th in the melody should be supported with the 7th and 3rd of the chord.

Ex. #445

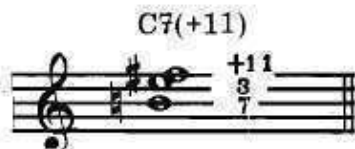


Ex. #446



or supported by the 3rd and 7th of the chord.

Ex. #447



Ex. #448



Ex. #449



**SPECIAL SITUATION NO. 3**

- 19) The 13th or b13th of a Dominant Chord in the melody should be supported with the 3rd and 7th of the chord.

Ex. #450



Ex. #451

**SPECIAL SITUATION NO. 4**

- 20) When the 3rd, 5th or 11/3 is in the melody of a MAJOR 7th, MINOR 7th, DOMINANT 7th, AUGMENTED 7th or DIMINISHED 7th CHORD, the 7th of the chord can be used IN PLACE OF THE ROOT.

Ex. #452



Ex. #453

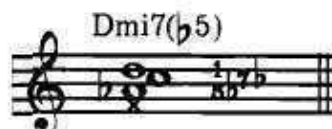


- 21) Because of the strength of the natural overtone series, the root of a chord can often be omitted. This function of the chord is so strong that the presence of the other functions of the chord imply the root. The root is normally the first part of the chord to be omitted, the 5th is the second part of a chord that can be omitted.

**SPECIAL SITUATION NO. 5**

- 22) IT IS USUALLY BEST TO RETAIN THE ALTERED FUNCTION OF AN ALTERED CHORD. For example, a Dmi7(b5) should contain the lowered 5th when only three pitches are used. This same thinking would apply when the 5th is raised in an augmented chord or lowered in a dominant 7th(b5). For this reason, a root in the melody would force the 3rd of the chord (indicated by the X) to be omitted. (See Examples 454 and 455.) A root in the melody of an Augmented 7th chord would force the 7th of the chord to be omitted. (See Example 456.)

Ex. #454



Ex. #455



Ex. #456



- 23) The following Table 18 details the three part harmonization of all melody notes for seven chord families.
- 24) Each voicing has a reference to either a SUBSTITUTION NOTE or a SPECIAL SITUATION. This detailed breakdown of melodic harmonizations can be used as a reference source for any application of three part density. Transpositions into the other keys will give you a complete reference source.
- 25) Acquaint yourself with the SOUND of the harmonization in Table 18.

TABLE 18

Table 18 displays the three-part harmonization of melody notes for seven chord families. The table is organized into rows for each chord family, and columns for the notes being harmonized. The notes are:  $\frac{6}{5}$ ,  $\frac{7}{5}$ ,  $\frac{9}{1}$ ,  $\frac{7}{5}$ ,  $\frac{11}{3}$ ,  $\frac{9}{1}$ ,  $\frac{6}{5}$ ,  $\frac{11}{3}$ ,  $\frac{9}{1}$ ,  $\frac{6}{5}$ .

The chord families and their corresponding harmonizations are:

- Cma and/or Cma7**: S.S.4,  $\frac{6}{5}$ ,  $\frac{7}{5}$ ,  $\frac{9}{1}$ , S.S.4,  $\frac{7}{5}$ ,  $\frac{11}{3}$ , S.S.2,  $\frac{9}{1}$ ,  $\frac{6}{5}$
- Dmi7**: S.S.4,  $\frac{1}{1}$ ,  $\frac{13}{5}$ ,  $\frac{7}{5}$ ,  $\frac{7}{5}$ ,  $\frac{9}{1}$ ,  $\frac{7}{1}$ , S.S.2,  $\frac{7}{6}$ , S.S.4,  $\frac{11}{1}$
- G7**: S.S.4,  $\frac{7}{1}$ , S.S.3,  $\frac{13}{5}$ , S.S.3,  $\frac{b13}{5}$ ,  $\frac{7}{5}$ ,  $\frac{7}{5}$ ,  $\frac{13}{5}$ , S.S.1,  $\frac{7}{1}$ , S.S.4,  $\frac{7}{1}$ , S.S.2,  $\frac{11}{1}$ , S.S.4,  $\frac{7}{1}$
- G+7**: S.S.4,  $\frac{7}{1}$ ,  $\frac{7}{1}$ , S.S.5,  $\frac{9}{1}$ ,  $\frac{7}{1}$ , S.S.2,  $\frac{7}{6}$
- Cmi6**:  $\frac{9}{5}$ ,  $\frac{7}{5}$ ,  $\frac{13}{5}$ ,  $\frac{9}{1}$ ,  $\frac{9}{5}$ ,  $\frac{11}{3}$
- C°7**:  $\frac{bb7}{1}$ ,  $\frac{b9}{b5}$ ,  $\frac{7}{6}$ ,  $\frac{9}{1}$ ,  $\frac{11}{3}$ ,  $\frac{7}{5}$
- Dmi7<sup>b5</sup>**: S.S.4,  $\frac{7}{1}$ ,  $\frac{b5}{3}$ , S.S.5,  $\frac{1}{b5}$ ,  $\frac{9}{1}$ , S.S.4,  $\frac{7}{1}$ ,  $\frac{11}{3}$ ,  $\frac{7}{1}$

- 26) We have discussed two steps to be aware of when implying 4, 5, 6 or 7 part harmony with three pitches. The first is outlined in Basic Technique No. 7, SUBSTITUTION NOTES. The second step is Basic Technique No. 8, SPECIAL SITUATIONS, which apply to harmonizing specific melodic problems.
- 27) To summarize these two steps, we arrive at these conclusions:
- 1) Any melody note that does not function as a basic root, third or fifth to the chord can be handled by SUBSTITUTION (i.e., 6/5, 7/1, 7/5, 9/1, b9/1 + 9/1, 11/3, +11/3, 13/5 and b13/5).
  - 2) When Dominant chords with the 9th in the melody, or any situation with an 11th or +11th in the melody are present, the 3rd and 7th of the chord should be used to support the melody note.
  - 3) When the 3rd, 11/3 or 5th of a Maj. 7th, Min. 7th, Dom. 7th, Aug. 7th or Dim. 7 chord is in the melody, the 7th of the chord can be used in PLACE OF THE ROOT, to help support the melody note and define the chord (i.e., 7/1).
  - 4) It is usually best to retain the altered function of an ALTERED CHORD. When the root of the chord is in the melody of a Dom. 7(b5) or Min. 7(b5), the 3rd is omitted. When the root of an Aug. 7th chord is in the melody, the 7th of the chord is omitted.
- 28) The following example illustrates an application of the various points we have covered regarding implying 4, 5, 6 or 7 part harmony with three pitches.

Ex. #457

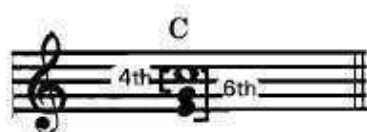
### TRIADS AS A SOURCE OF THREE PART DENSITY

- 29) The use of TRIADIC SHAPES play a very important part in any arranger's facility with harmonization. One main reason why triads assume this importance is that the MAJOR and MINOR TRIAD SHAPE (wherein each tone supports the others) provides a built-in, natural strength. Musicians can achieve a truer intonation playing the triad relationship than densely saturated clusters of notes that make it difficult for the individual musician to "hear" himself in relation to the other instruments playing at the same time.
- 30) This advantage, coupled with the great rhythmic mobility possible with triads, combines to give us a very practical technique that applies to:
- 1) Rock, jazz and commercial styles of music;
  - 2) Any tempo or meter;
  - 3) Any instrumentation, from combos to the largest stage band;
  - 4) Modal writing in particular.

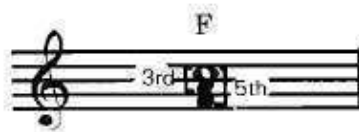
### BASIC TECHNIQUE NO. 9 TRIADS AS MELODIC COUPLINGS

Triads have their greatest effectiveness when they move independently. This means that the triads can function as MELODIC COUPLINGS. (Review Basic Technique No. 4.) In so doing, they follow the contour and rhythm of the melody line. In the same way that we added a MELODIC COUPLING both above and below the melody line (review Example 428) we can as easily add two pitches below the melody.

Ex. #458



Ex. #459

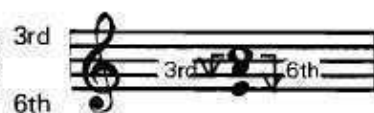


- 31) We will approach the use of triads as MELODIC COUPLINGS by breaking down the DIATONIC INTERVALS inherent in the basic triad relationship. Any triad (in its various inversions) is made up of one of these combinations of intervals, DOWN from the melody:

Ex. #460



Ex. #461



Ex. #462



- 32) The factor that determines whether the interval is a Major 3rd, Minor 3rd, Perfect 4th, Augmented 4th, Major 6th or Minor 6th is the particular scale being used at that point. All selections of the specific interval are regulated by the DIATONIC NOTES IN THE SCALE OF THE KEY AREA.
- 33) In this sense, the selection of the note is AUTOMATIC once you have determined the basic scale and the interval relationship you wish (review the breakdown of intervals above). These interval combinations can be PARALLEL (remain the same for an entire phrase of the melody) or MIXED (change at random).
- 34) The assigning of the COUPLINGS is the decision to use one of the following:

Ex. #463

MELODY NOTE

4th Coupling

6th Coupling

MELODY NOTE

3rd Coupling

6th Coupling

MELODY NOTE

3rd Coupling

5th Coupling

- 35) The resultant effect of the above is the formation of these Inversions of DIATONIC TRIADS, USED AS MELODIC COUPLINGS. (See Example 471.)

### BASIC TECHNIQUE NO. 10

#### DIATONIC TRIADS

- 36) A second approach to the use of triads for three part density is the technique of DIATONIC TRIADS.
- 37) Any note of a scale can function as the ROOT, THIRD or FIFTH of a MAJOR, MINOR, DIMINISHED or AUGMENTED TRIAD. The strongest triads and the most effective are the MAJOR and MINOR SHAPES. Diminished and Augmented triad shapes should be avoided because of their weak tonal relationship.
- 38) Because of the PLURALITY of the inversions of a triad, the note "D" for example could be thought of as the 5th of a G Major triad, the 3rd of a B minor triad, or the root of a D Major triad.

Ex. #464



- 39) The flexibility of the inversions give us three choices with which to harmonize the melody note "D," DIATONICALLY in the key of G. To further clarify this INTERCHANGEABILITY between the inversions of diatonic triads, refer to Example 465.

Ex. #465

MELODY NOTES:	D	E	F#	G	A	B	C	D
CHORDS: G	Ami	Bmi	C	D	Emi	F#o	G	
CHORDS: Bmi	C	D	Emi	F#o	G	Ami	Bmi	
CHORDS: D	Emi	F#o	G	Ami	Bmi	C	D	

Example 465 illustrates the interchangeability of diatonic triads for the melody notes D, E, F#, G, A, B, C, and D in the key of G. The table shows three rows of chords that can harmonize each melody note. The chords are written in G major (one sharp).

- 40) Example 465, therefore, provides us with a table of all possible diatonic solutions effecting any melody note of the G major scale. The actual choice from this table would be mainly determined by the basic harmonization of the lead sheet of the composition.

### CHORD TONES, PASSING AND NEIGHBORING TONES

- 41) When a diatonic melody note functions as a chord tone, of the GIVEN CHORD SYMBOL, any of the three triad choices can be used for the harmonization.
- 42) When a diatonic melody note functions as a PASSING OR NEIGHBORING TONE, that specific note can be harmonized by thinking of it as the ROOT, THIRD or FIFTH of a diatonic Major or Minor triad, not indicated in the lead sheet.
- 43) As an example of this procedure we would start with the following melody and basic harmonization.

SC

Ex. #466

G Ami7

CT PT PT CT NT CT NT CT CT CT

- 44) Each of the melody notes are labeled C.T. (for chord tone), N.T. (neighbor tone), or P.T. (for passing tone), depending upon each note's relationship to the G Major triad that harmonized the first six beats of the example. Example 467 completes the procedure, determining a diatonic triad in each instance.

Ex. #467

Bmi C D Emi D Bmi C G Bmi Ami7

CT PT PT CT NT CT NT CT CT CT



- 45) Each choice of triad for a passing or neighbor tone is determined by finding the diatonic triad that has that passing or neighbor tone as its root, 3rd or 5th, then eliminating two of these possibilities, retaining the one possibility that appeals to you most.
- 46) Relate each solution in Example 467 to Example 465 which details all three triadic choices for each melody note.

### ADJACENT ALTERNATING DIATONIC TRIADS

- 47) A refinement of the previous technique involves **RESTRICTING** the triads we can use to harmonize a diatonic melody. To accomplish this, two adjacent **DEFINITIVE** triads from the Major scale, all three minor scales and all the modal scales are selected.

They are detailed in Table 19.

The selection of the pairs of definitive triads from the various scales in Table 19 enables us to harmonize diatonic melodies, using inversions OF JUST THESE TWO DEFINITIVE TRIADS. This restriction of triads creates its own "sound," as every time the same two chords are repeated, the reinforcement becomes stronger.

Table 19 includes eight instances where identical **DEFINITIVE TRIADS** are used. In the particular examples used in Table 19, the Key of C is the basic tonality. The three minor scales are the **RELATIVE MINORS** of C major (i.e., A minor). The six **MODAL** scales listed in the Table are **DISPLACEMENTS** of a C major scale and are, therefore, **RELATED MODAL SCALES** to the C MAJOR SCALE.

Because of the recurrence of the IV-V pair of chords (all indicated with —\*) it is possible to memorize the majority of Definitive Triads listed in this Table by thinking Sub-Dominant to Dominant in any basic key area used.

The application of these Definitive Triads is as follows: Example 468 represents an original melody which needs to be harmonized in three part density, using adjacent alternating diatonic triads.

#### Ex. #468





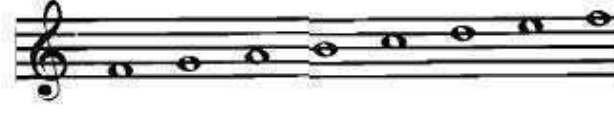




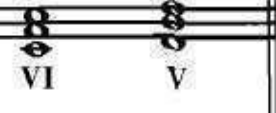






TABLE 19

Scales:	Definitive Triads:			
C Major	C	Dmi	F	G
	I	II	IV	V
A Harmonic Minor	F	E		
	VI	V		
A Melodic Minor	D	E		
	IV	V		
A Natural(Normal) Minor	C	Dmi	F	G
	III	IV	VI	VII
			G	G
				Ami
				I

TABLE 19

<p>D Dorian Mode</p> 	<p>F G</p>  <p>III IV</p>
<p>E Phrygian Mode</p> 	<p>F G</p>  <p>II III</p>
<p>F Lydian Mode</p> 	<p>F G</p>  <p>I II</p>
<p>G Mixolydian Mode</p> 	<p>F G</p>  <p>VII I</p>
<p>A Aeolian Mode</p> 	<p>F G</p>  <p>VI V</p>
<p>B Locrian Mode</p> 	<p>F G</p>  <p>V VI</p>

- 48) The scale that this melody is based on is the D Dorian Mode (row 5 of Table 19). Once the scale has been determined, the selection of the DEFINITIVE TRIADS is listed in the Table. Each pair of triads means that by using INVERSIONS of the two triads, six possible melody notes can be harmonized.

Ex. #469



- 49) This example illustrates the harmonization by use of the alternating triads. The remaining melody note in Example 469 is not harmonized by either the F or G triad. To find the harmonization for ANY MELODY NOTE NOT INCLUDED IN THE TWO DEFINITIVE TRIADS, simply choose ANY DIATONIC TRIAD from the same scale that contains the melody note. For example, in Example 469, the melody note "E" could be harmonized with a C major or A minor or E minor triad, all of which are diatonic triads to the D Dorian mode.

- 50) To apply this thinking to our earlier melody (Example 468), we would use combinations of inversions of the F and G major triads. At the one point (indicated by an "X") where the melody does not fit either the F or G major triad, a diatonic triad has been chosen, in this case, C major.

SC

Ex. #470



- 51) This procedure produces an individual and unique sound, a result of the continued use of the inversions of the TWO DEFINITIVE TRIADS reflecting the specific scale. The following example from NIGHTHAWK illustrates this technique.

Ex. #471

### NIGHTHAWK

m.m. = 180

SC

### CHROMATIC TRIADS

- 52) Still another refinement of the use of triads involves the introduction of triads containing notes **CHROMATIC TO THE KEY AREA**.
- 53) This is a technique using **CHROMATIC TRIADS** based on the **PLURALITY** produced when we allow any melody note to function as the Root, Third or Fifth of a **MAJOR** or **MINOR** triad. In most instances, the choice of the **MAJOR** triad is more effective and contrasting.

- 54) The melody note "C" (in the key area of "C") can be thought of as functioning as the ROOT of a "C" major triad,

Ex. #472



the THIRD of an "Ab" MAJOR triad:

Ex. #473



or as the FIFTH of an "F" MAJOR triad:

Ex. #474



- 55) It could also be thought of as the ROOT of a "C" minor triad,

Ex. #475



THIRD of an "A" minor triad; Ex. #476

and FIFTH of an "F" minor triad.



Ex. #477



- 56) Any of these six possibilities containing a note or notes CHROMATIC to the BASIC KEY AREA becomes more interesting because of the FRESHNESS and INHERENT CONTRAST introduced by the chromatic notes involved.

- 57) The following example shows how a "C" major scale could be reharmonized by the above technique.

Ex. #478

SC





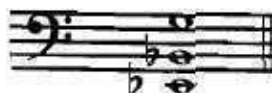
By dropping the "C" an octave, the closed position has been opened to become:

Ex. #482



- 66) When triads are written in open position, the lower pitched instruments should usually keep the ROOT ON THE BOTTOM:

Ex. #483



If an inversion is used,

an interval of a 6th, Ex. #484



or a 10th  
two notes.

Ex. #485



should be maintained between the bottom

#### CLOSED AND OPEN

#### FOURTH STRUCTURES

- 67) Our final source of three part density concerns structures of perfect 4th intervals. These can be utilized in either open or closed positions. The open position consists of two perfect 4th intervals covering a span of a minor 7th interval down from the melody note.

Ex. #486



- 68) The term "closed 4th" is only used to define the shape of the particular group of three notes. The SOUND of this grouping is basically a 3rd, with the lowest note SOUNDING LIKE an added tone in relation to the 3rd. The 3rd INTERVAL IN A CLOSED 4TH VOICING DEFINES THE HARMONIC IMPLICATION OF THE VOICING. This consideration must always be primary when applying the voicing.

- 69) The closed position consists of a 3rd and 4th interval down from the melody note, covering a span of a perfect 4th interval.

Ex. #487



In the closed 4th position, the 3rd interval is determined by the diatonic note available in the scale of the key area. For example, if I wish to write a closed 4th position down from the melody note "D" to "A": Ex. #488



I would need to determine if the 3rd interval down from the melody should be a Major 3rd or Minor 3rd interval.

- 70) If my key and scale is Bb, I could then figure it this way:

Ex. #489



- 71) This means the Bb scale has supplied the Bb, eliminating the possibility of the Minor 3rd interval and the note, B natural.



### FOURTHS APPLIED TO MELODIC COUPLINGS

- 72) Both open and closed 4th voicings can function as melodic couplings (review Basic Technique No. 4). They can be applied as melodic couplings in two ways. First as **DIATONIC MELODIC COUPLINGS**
- 73) Closed 4ths as **DIATONIC MELODIC COUPLINGS** are determined consistently as explained in Example 489, i.e., the scale **SPELLS OUT** the specific major or minor 3rd interval. Example 490 illustrates a "C" major scale using closed 4th structures as **DIATONIC MELODIC COUPLINGS**.

Ex. #490

SC



- 74) Each black note in Example 490 represents the tone defined by the scale. The boxed segment of Example 490 refers to the **TRI-TONE** relationship that is present in any major, modal, natural, harmonic or melodic minor scale. A more effective handling of determining the middle note is accomplished by figuring the **DIATONIC THIRD** interval UP from the lower note (instead of down from the melody note) as shown in Example 490. The boxed version is then to be favored over the other solution shown in parentheses. Applying this approach to the melody of **LIKE QUAIN**, the following steps would be taken.

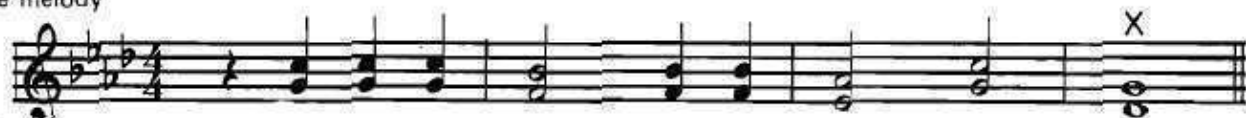
Ex. #491

Original Melody:



Ex. #492

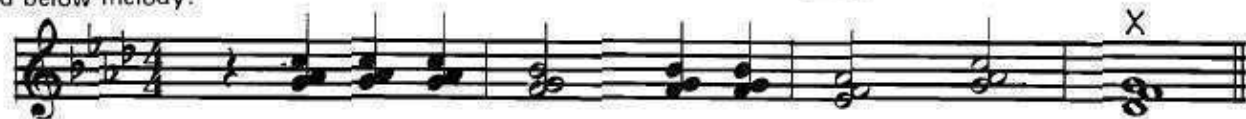
Melodic Coupling  
a Per. 4th below  
the melody



Ex. #493

Addition of middle  
tone a **DIATONIC**  
3rd below melody:

SC



MEASURES 9

10

11

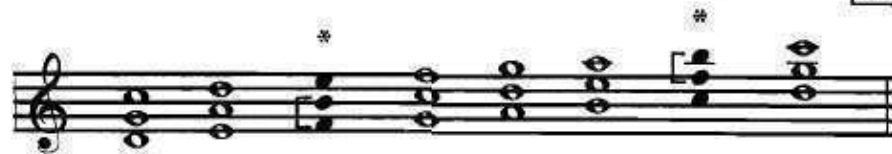
12

- 75) The X by the note "G" in the melody is an example of the TRI-TONE problem which has been solved by figuring the diatonic 3rd interval UP FROM THE LOWER NOTE (Db).

### DIATONIC OPEN 4THS

- 76) Open 4ths can be used as DIATONIC MELODIC COUPLINGS in certain idioms. Because of the need to maintain PERFECT 4th intervals (review Example 486), it is necessary to avoid, where possible, the TRI-TONE problem. Avoiding the TRI-TONE automatically eliminates the use of major, minor and modal scales except where it can be controlled to the extent that the situations with the TRI-TONE can be circumvented.

Ex. #494



- 77) The asterisks indicate those melody notes that create the TRI-TONE (augmented 4th) intervals.
- 78) The most natural setting for DIATONIC OPEN 4THS can be found when the BLUES SCALE (with the exception of the flatted 5th) is used as a MELODIC SOURCE.

Ex. #495



- 79) In this context the DIATONIC OPEN 4THS function perfectly as MELODIC COUPLINGS.

Ex. #496

### POOR BOY



- 80) In Example 496, point X illustrates a problem of a chromatic melodic note, solved by using CHROMATIC PARALLEL OPEN 4THS, refer to Example 495 (\*).
- 81) Point Y raises the problem of a melody note which, if used to construct Diatonic Open 4ths, would create a TRI-TONE situation. This is solved by applying ONE PART DENSITY, returning to Diatonic Open 4ths at point Z where the melodic function again lends itself to perfect 4th couplings.

### CHROMATIC PARALLEL CLOSED

#### AND OPEN FOURTHS

- 82) Chromatic Parallel Closed and Open 4ths can be applied to a melody by determining a SET INTERVAL RELATIONSHIP OR MELODIC COUPLING and moving this relationship in a parallel fashion through an entire melodic phrase.
- 83) This process is then a strict transpositional procedure. The effect is one of REHARMONIZATION, a result of the introduction of chromatic tones to the basic scale and key area and the FIXED PARALLEL USAGE OF THE INTERVAL RELATIONSHIP.
- 84) In general terms, an application of this technique provides a very stylized effect, more in keeping with a jazz concept. It is also characteristic in limited rock interpretations.
- 85) Applying this procedure to the melody in Example 497, I will use CHROMATIC PARALLEL CLOSED 4THS with an interval relationship of a MAJOR 3RD down from the melody and a PERFECT 4TH interval relationship down from the melody.

Ex. #497

ORIGINAL MELODY:

SC



Ex. #498

APPLYING CHROMATIC PARALLEL CLOSED 4THS:

SC



- 86) I will now apply CHROMATIC PARALLEL OPEN 4THS with an interval relationship of a PERFECT 4TH down from the melody, and a MINOR 7TH interval down from the melody.

Ex. #499

SC



- 87) Review the preceding Examples 468, 471, 491, 492 and 493, and compare the contrasting effects caused by the different treatments.

### HARMONIC DEFINITION USING OPEN AND CLOSED 4THS

- 88) The heart of gaining facility with a stylized voicing such as open and closed 4ths is the understanding of how these 4th voicings relate to CONVENTIONAL CHORD SYMBOLS. *To maintain the strictness of the 4th sound and at the same time reflect the harmonic implications of normal chord symbols forces us to use a careful and specialized number of PRE-SET POSSIBILITIES.*
- 89) These possibilities are predicated on CHORD FAMILIES (refer to Tables 1 through 4). The specific applications to follow can be found by intuitive methods, or by study. You should strive to understand the theory involved, but at the same time familiarize yourself *with the sounds and, over a period of time, relate the theory to the sound and the sound to the theory.*
- 90) The next Table, Table 20, will define all open and closed 4th voicings that:
- 1) Apply to a GIVEN CHORD FAMILY;
  - 2) Reflect the harmonic ramifications of that CHORD FAMILY (see Table 20).
- 91) Table 20 should be studied as follows:
- a) Each chord family is categorized according to how each type of chord functions within a key area.
  - b) Examples are presented as used in the key areas of C Major and C minor. *Along with the written examples in C Major and minor are the standard chord symbols that make up the chord family.*

TABLE 20

All examples in C Major or Minor

**Voicings Applied to Melody**

**I CHORD FAMILY (C, C6, Cma7, Cma9, C6(9))**

Open 4ths: (1) (2) (3)

Closed 4ths: (6) (7) (8) (9)

**II m7 Chord Family (Dm7, Dm9, Dm11)**

Open 4ths: (13) (14) (15) (16)

Closed 4ths: (20) (21) (22)

**V 7 CHORD FAMILY (G7, G9, G13)**

Open 4ths: (26) (27) (28) (29)

Closed 4ths: (32) (33) (34) (35) (36)

**Voicings Applied as Background or Harmony**

Open 4ths: (4) (5)

Closed 4ths: (10) (11) (12)

Open 4ths: (17) (18) (19)

Closed 4ths: (23) (24) (25)

Open 4ths: (30) (31)

Closed 4ths: (37) (38) (39)

TABLE 20

**I mi Chord Family** (Cmi, Cmi6, Cmi ma7, Cmi6(9)  
Cmi ma9, Cmi7)

Open 4ths: (40) (41) (42)

Closed 4ths: (46) (46) (47) (48) (49)  
+5

**II mi7(b5) Chord Family** (Dmi7(b5), Dmi7(b5),  
Dmi9(+5), Dmi 11(b5)  
b5

Open 4ths: (52) (53) (54) (55)

Closed 4ths: (58) (59)

**ALT. V7 CHORD FAMILY** (G7(b9), G7(+9)  
G13(b9) )

Open 4ths: (62) (63)  
aug.4 dim.4  
aug.4

Open 4ths: (64) (65) (66)  
dim.4  
aug.4 min.3  
aug.4

**Dim.7 Chord Family--Applied to  
Melody and Background or Harmony**

(67) (68) (69) (70)

(71) (72) (73) (74)

- c) The most effective procedure to apply the voicings in this table would be to define a chord symbol into its proper category. This can be checked by transposing any chord symbol to be applied to correspond with the symbols shown in Table 20 in the key of "C".
- d) Once this has been done, the written examples can also be transposed to arrive at the specific voicings which you would then use in your arrangement.

### ORCHESTRAL POSSIBILITIES APPLIED TO THREE PART DENSITY

- 92) Three part density can apply in the following orchestral situations:
- a) Small groups of three horns;
  - b) Three horn sections of a "small" big band (see breakdown below);
    - 1) Three trumpets
    - 2) Three trombones
    - 3) Two trumpets, one trombone
    - 4) Three saxes
    - 5) Three woodwinds
    - 6) Triadic combinations for Vibes, Guitar and Piano
  - c) Ensemble voicings in three part density. (See Chapter 18.)
  - d) All the implications of BASIC INSTRUMENT RANGES as well as Tables 15 and 16 apply here. ALL THE SOURCES OF THREE PART DENSITY COVERED IN THIS CHAPTER WOULD APPLY TO THE ABOVE INSTRUMENT COMBINATIONS.

### MIXING ONE, TWO AND THREE PART DENSITIES

- 93) One of the more important concepts in our study of density is the awareness that ALL LEVELS OF DENSITY ARE INTERCHANGEABLE.
- 94) The factor that determines WHERE AND HOW is our musical taste, which is how we individually shape the effect of CONTRASTING THE LEVELS OF DENSITY.
- 95) Any abrupt change of density introduces the effect of CHANGE and SURPRISE, thus creating a technique to continually revitalize interest throughout a chart.
- 96) At this point, refer to the score of SCUFFLE (see Appendix). Note in particular the mixing of 1, 2 and 3 part density throughout measures 9 to 40 and the effect produced by this contrasting use of density.

**TYPICAL RANGES**  
**OF VARIOUS SECTIONS OF A BAND**  
**(Relating to the Harmonic Sources Covered)**

- 97) This chapter on three part density is the first level of density dealing with chord structures. Because of this, the following situation is present: The ranges of various sections of a band must be handled with respect to the depth of the voicing needed to state the harmony notes supporting the melody. The following breakdown will specify the harmonic sources we have discussed, relative to each section of instruments as well as the conventional effective ranges each section can be written in.
- 98) **TRUMPET SECTIONS USE THESE CONVENTIONAL SOURCES OF PITCHES:**
- a) Triads in Closed Positions (3 Trpts) (triads with lead doubled an octave lower for four trumpets);
  - b) 4th Structures in Open and Closed Positions;
  - c) Implied 4, 5, 6 and 7 part chords using combinations of 4th, 3rd and 2nd intervals.
- 99) **SPECIAL NOTES:** Trumpets as a section should not exceed an overall span of more than a 9th interval to attain a blending effect within the section. This 9th interval span is fairly rare. An octave span is the normal accepted limit of span. The range, therefore, of a three or four trumpet section should be:

Ex. #500



- 100) Obviously, both ends of this range example could be extended; the lower end by possibly a whole step; the upper end determined by the abilities of your specific lead and 2nd trumpet. Flugelhorn doubles enable you to write lower. (Review Chapter 1 regarding the flugelhorn.)
- 101) **TROMBONE SECTIONS USE THESE CONVENTIONAL SOURCES OF PITCHES:**
- a) Triads in Open and Closed Positions;
  - b) 4th Structures in Open Position;
  - c) Closed 4th Structures may be used in this range:

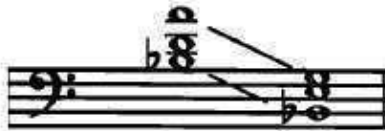
Ex. #501





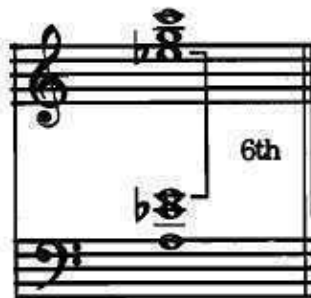
- d) Implied 4, 5, 6 and 7 part chords using combinations of 3rd and 2nd intervals in this range:

Ex. #502



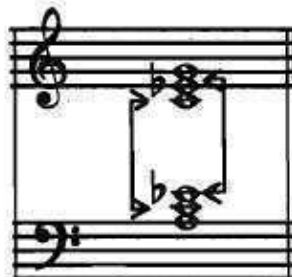
- 102) **SPECIAL NOTES:** The character of the three trombone section is such that an understanding of its effective ranges and **SOURCES OF THREE PART DENSITY** is very necessary. The fact that trombones are low pitched automatically presents the section with the responsibility of **DEFINING** the more basic pitches of a chord.
- 103) The section is usually used one of these three ways:
- 1). With trumpets as a **TOTAL SECTION**;
  - 2) As a soli (trombone section plays the lead);
  - 3) As background soli (or harmonic pad, no melody).
- 104) The corresponding effective ranges for each of the instances are as follows:
- 105) **TROMBONES USED WITH 3, 4 OR 5 TRUMPETS AS A TOTAL SECTION:**
- a) The interval between the **LOWEST TRUMPET AND 1ST TROMBONE** should not exceed a 6th interval, and preferably not a 5th interval.

Ex. #503



- b) When low trumpets are written it is possible to double the lower trumpets with the upper trombones.

Ex. #504



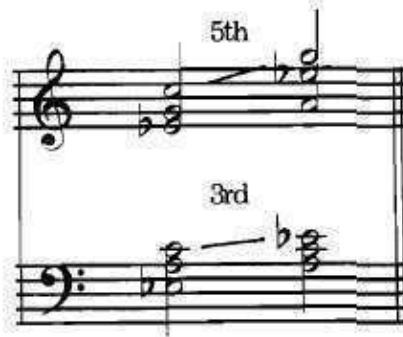
- c) The most effective range in terms of fullness is shown in Example 505. The body of the trombone voicing should be kept within this span.

Ex. #505



- d) This can be maintained regardless of how the trumpets move (following the melody) by VOICELEADING THE TROMBONES INDEPENDENTLY TO THE TRUMPETS.

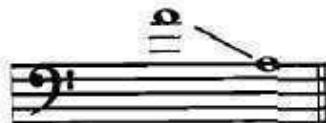
Ex. #506



#### 106) TROMBONES USED AS A SOLI:

- a) When trombones are written SOLI it is important to choose the key that will place the melody in the trombone's best range. The 1st trombone playing the lead should work in the following range:

Ex. #507

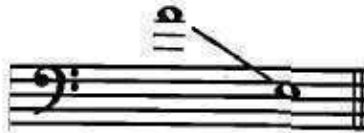


- b) Notes higher than the "A" indicated are, of course, possible but considerations such as tempo, rhythmic patterns and facility of the player should be kept in mind.
- c) Notes falling lower than the "A" indicated can be accommodated by falling back to a thinner density, thus avoiding the problem of low, muddy 3, 4 and 5 part voicings.

107) TROMBONES USED AS HARMONIZED BACKGROUND SOLI:

- a) When trombones are used as a harmonized background soli or harmonic pad, the entire practical trombone range is possible, placing the lead trombone in this range:

Ex. #508



- b) In writing background voicings the arranger has the advantage of placing the voicing where he wishes. This is in direct contrast to a trombone soli where the MELODY DICTATES the placement of the voicings.

- c) When the trombones are written in the lower portion of their range, the following general rules should be followed:

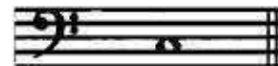
- 1) Closed triadic voicings should not go lower than:

Ex. #509



Ex. #510

- 2) When the lowest trombone goes below



The chord should be written in an open position so that the smallest interval between the lowest trombone and the next to the lowest trombone is at least a perfect 5th interval.

Ex. #511



Minimum of a perfect  
5th interval

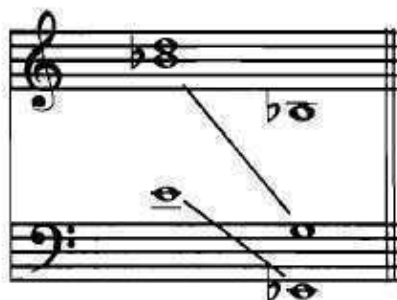
- d) The most important option to keep in mind concerning background writing is the availability of both open and closed voicings. This availability enables you to use the best voicing for both the highest and lowest portions of the trombone range.

108) SAX SECTIONS USE THESE CONVENTIONAL SOURCES OF PITCHES:

- a) Triads in Open and Closed Positions;
- b) 4th Structures in Open and Closed Positions;
- c) Implied 4, 5, 6 and 7 part chords using combinations of 3rd and 2nd intervals.

109) SPECIAL NOTES: The saxes as a section in three part density will normally use a concert range of:

Ex. #512



110) WOODWIND SECTIONS USE THESE CONVENTIONAL SOURCES OF PITCHES:

- a) Triads in Open and Closed Positions;
- b) 4th Structures in Open and Closed Positions;
- c) Implied 4, 5, 6 and 7 part chords using combinations of 4th, 3rd and 2nd intervals.

111) SPECIAL NOTES: Woodwinds can, of course, be made up of many instrumentations. Some of the normal combinations are:

Flute (opt. Picc.)

Flute

Flute

Clarinet

Flute

Flute

Flute

Clarinet

Flute

Oboe (Eng. Horn)

A

B

C

D

Flute (Opt. Picc.)

Flute

Flute

Clarinet

Flute

Flute

Flute

Clarinet

Flute

Oboe (Eng. Horn)

Clarinet

Clarinet

Flute

Clarinet

Clarinet

Clarinet

Clarinet

Bass Clarinet

Bass Clarinet

Bass Clarinet

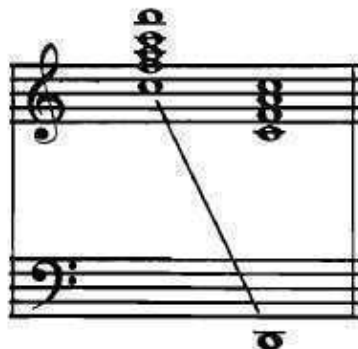
112) INSTRUMENTATION "A" HAS THE FOLLOWING PRACTICAL RANGE:

Ex. 513



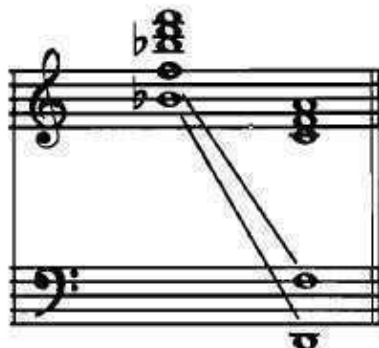
113) INSTRUMENTATION "B" HAS THE FOLLOWING PRACTICAL RANGE:

Ex. 514



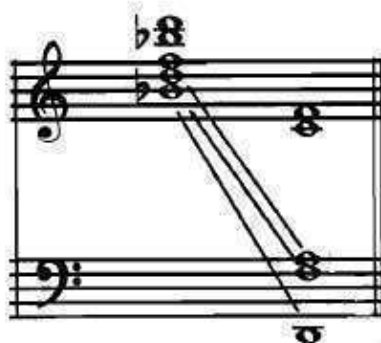
114) INSTRUMENTATION "C" HAS THE FOLLOWING PRACTICAL RANGE:

Ex. #515



115) INSTRUMENTATION "D" HAS THE FOLLOWING PRACTICAL RANGE:

Ex. #516



- 116) All of the SECTION RANGES specified in this chapter are designed to establish guidelines to give you:
- A means of picking effective keys.
  - Characteristic SAFE ranges for each section, and the awareness of the care that should be taken when exceeding either end of these stated section guidelines.
- 117) An arranger should relate his listening and analytical efforts to these points so that over a period of time he can consistently and effectively "think" in these areas, and "hear" in these terms.

### EXAMPLES OF THREE PART

#### ENSEMBLE VOICINGS

- 118) The following Example 517 illustrates some very effective ensemble voicings utilizing a total effect of three part density.
- 119) Any note indicated as a black notehead represents a possible doubling for an additional instrument of that section. Consequently, these examples show voicings from three trumpets to four, three trombones to four, and three saxes to five. A black notehead in parentheses represents AN OPTIONAL DOUBLING.

#### Ex. #517

Trumpets

Trombones

Saxes



## SECTION IV — DENSITY

### Chapter 15: Four Part Density

- 1) Four part density is the first level of density, the effect of which is that of "full harmony." It is full and complete in the sense that **EACH FOUR PART CHORD NOW DEFINES THE SPECIFIC CHORD FAMILY INVOLVED.** As soon as this factor is present, certain basic harmonic obligations become critical, such as:
  - a) Correct use of altered chords;
  - b) How chords lead to each other;
  - c) Passing chords;
  - d) Substitution notes in the inner voice.
  
- 2) An extensive coverage of regular and altered forms of four part harmony can be found in Volume I of my *Encyclopedia of Harmony and Theory Applied to Improvisation For All Instruments*. If there is any question or lack of comprehension and facility in this area, review these points by studying Volume I or any other qualified source on the subject. Passing chords are covered in Chapter 8 of this book.
  
- 3) **THE SOURCES OF FOUR PART DENSITY ARE:**
  - a) Four part harmony in open and closed positions;
  - b) Implying 5, 6 and 7 part harmony with four pitches;
  - c) 4th Structures in open position;
  - d) Closed 5th Clusters.

#### OPEN FOUR PART VOICINGS

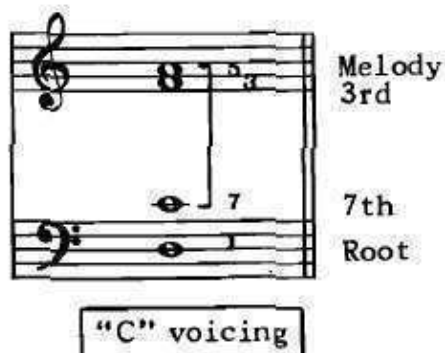
##### The "C" Voicing

- 3a) An approach to four part density is to construct open voicings in the following manner:
  - 1) Determine the melody note and the placement of the root of the chord. (See Example 517a.) The placement of the root is dependent upon the **SPAN OF ORCHESTRATION DESIRED.**
  - 2) Add either the 3rd or 7th of the chord, or both when the 3rd or 7th is not the melody note. (See Example 517b.)
  - 3) Finally, if a fourth voice is still needed, add the 5th or 6th of the chord. (The 6th of the chord is of course dependent on the particular chord type.)

Ex. #517a



Ex. #517b



Ex. #517c



- 3b) The top three voices (as indicated by the bracket in Ex. 517b) are usually confined to a span of **LESS THAN AN OCTAVE** to insure a more even blend between the instruments.
- 3c) Example 517c illustrates how the melody can be **DOUBLED AN OCTAVE LOWER** (see the black notehead in the example), creating an **OPEN FOUR PART DENSITY VOICE WITH FIVE INSTRUMENTS**.

### BASIC TECHNIQUE NO. 11

#### FOUR PART DENSITY IN OPEN AND CLOSED POSITIONS

- 4) The spelling of a four part chord whose span from the top note to the bottom note is **LESS THAN AN OCTAVE** is generally called **BLOCK VOICING** or **CLOSED POSITION**.
- 5) Block voicing is the basic all-purpose voicing that is an essential sound in areas of writing such as:
- Swing music;
  - "Dance Band" music;
  - Commercial music;
  - Some styles of jazz music.
- 6) The following examples illustrate some block voicings:

Ex. 518



Ex. 519



Ex. 520



- 7) The important function that **BLOCK VOICING** performs is to give us a **FULL HARMONIC VOICING** that **FOLLOWS THE MELODY LINE BOTH RHYTHMICALLY AND BY SHAPE** (direction). Each melody note is the top note of the voicing. The harmony notes (specified by the chord symbol) are added, working **DOWN FROM THE MELODY IN ADJACENT 3rd and 2nd intervals**, as the chord symbol dictates.

Example 521 gives us a melody and chord symbols:

Ex. #521





- 8) Each melody note therefore **DEFINES THE INVERSION** of the chord symbol.

Ex. #522

SC



- 9) *Example 522 is a typical illustration of a block trumpet section or woodwind section scoring. When four part BLOCK voicings are written with five instruments, the melody is DOUBLED AN OCTAVE LOWER.*

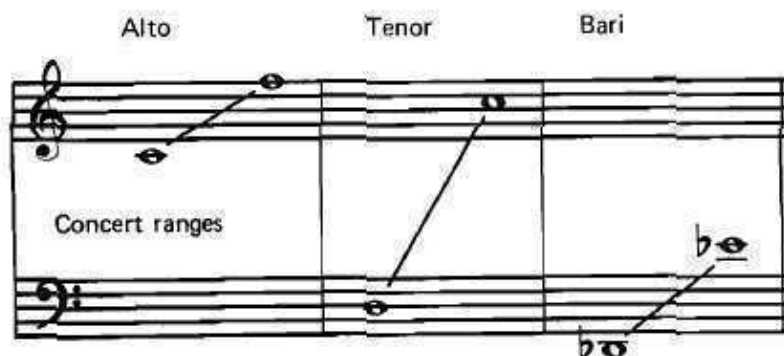
Ex. #523

SC



- 10) This is a typical example of five saxes or five brass block voicings. Notice how the **INNER PARTS** of Example 523 all move, following the contour of the melody. This is always preferred to inner voices **REPEATING NOTES**. (See Chapter 7, Paragraphs 20 and 21 for more on cross-voices).
- 11) When writing for five saxes there is a problem of voicing chords so that the Alto, Tenor and Baritone saxes will remain in their individual effective ranges.

Ex. #524



- 12) To automatically score the block voicing in such a way as to ADJUST to the different ranges of the saxes, two simple variations of block writing can be used.
- 13) The first variation is to DROP THE SECOND VOICE FROM THE TOP OF THE BLOCK VOICING, one octave. Example 525 shows the result of dropping the second voice from the top of Example 522.

Ex. #525

Example 525 shows a musical score for two staves (treble and bass) in 4/4 time. The key signature has two flats (Bb and Eb). The first measure contains the Fmi7 chord, and the second measure contains the Ebma7 chord. The voicing is a block voicing with the second voice dropped one octave. A box labeled 'SC' is above the second measure.

- 14) By comparing Examples 523 and 525, you can see that the baritone sax part is now a third lower in Example 525 than it was in Example 523. This accomplished its purpose of placing the lower pitched saxes lower in the voicing.

WE WILL REFER TO THIS PROCEDURE AS THE "A" VOICING.

- 15) A further variation of the basic block voicing is the "B" voicing. In this instance, BOTH THE SECOND AND FOURTH NOTES FROM THE TOP OF THE BLOCK VOICING ARE DROPPED AN OCTAVE.

WE WILL REFER TO THIS PROCEDURE AS THE "B" VOICING.

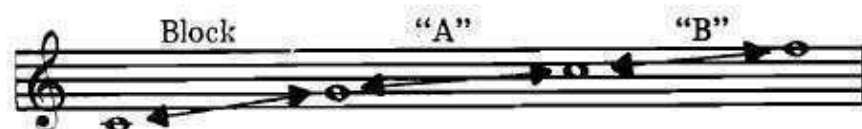
- 16) Example 526 illustrates how this would apply to Example 523.

Ex. #526

Example 526 shows a musical score for two staves (treble and bass) in 4/4 time. The key signature has two flats (Bb and Eb). The first measure contains the Fmi7 chord, and the second measure contains the Ebma7 chord. The voicing is a block voicing with the second and fourth notes from the top of the block voicing dropped an octave. A box labeled 'SC' is above the second measure.

- 17) Again, a comparison of Example 526 to previous Examples 523 and 525 shows the lower pitched instruments to be written even lower in the chord than before. The result of the "A" and particularly the "B" voicing is that even though the alto lead is in its middle or higher register, the baritone sax can remain in its fuller middle register.
- 18) Block "A" and "B" voicings are both valid approaches to voicing conventional four part harmony. They can both be used in most situations. The main purpose of the "A" and "B" voicings is to prevent the tenor and baritone saxes from being written too high in their range. To accomplish this, there is an overall guideline to use to determine the most effective voicing at any point. It is predicated on the PLACEMENT OF THE LEAD ALTO SAX.
- 19) The following example (see Example 527) represents the lead alto concert playing range:

Ex. #527



- 20) Example 527 means that:
- When the lead alto is written in concert from middle "C" to "G," block voicings best suit the registers of all the saxes.
  - When the lead alto is written in concert from "G" above middle "C" to an octave above middle "C," "A" voicings best suit the registers of all the saxes.
  - When the lead alto is written in concert from an octave above middle "C" to "F," "B" voicings best suit the registers of all the saxes.
- 21) Each dividing point between changes of voicings can be interpreted as either voicing. The melody note "G" for example could therefore be voiced either in BLOCK or "A" voicing.
- 22) Example 528 utilizes all three voicings in relation to the range guideline shown above in Example 527.

Ex. #528

SC

A musical score for Example 528. The top staff is the lead alto line, and the bottom staff is the saxophone section. The lead alto line is in treble clef, and the saxophone section is in bass clef. The score is divided into measures with various voicings indicated above and below the notes. The voicings are: Cma7, Dmi7 Cma7, Dmi7, E<sup>o</sup>7, Dmi7, Cma7, and Fma7. The saxophone section has a box labeled 'X' in the first measure and 'x' in the second measure. The bottom staff has a line of notes with a box labeled 'X' in the first measure and 'x' in the second measure.

- 23) This same technique of variations of sax voicings would not apply to other sections of the band, particularly the brass. The brass, being higher pitched, will not blend as a section if voiced in too open a voicing, such as a "B" voicing.
- 24) The small X's in Example 528 refer to the SUBSTITUTION of the 9th in place of the root. This is quite common and desirable for a modern sax section sound. This principle of using substitution notes (particularly the 9 for 1) in the inner voices can be applied in most instances. (See Basic Techniques Nos. 7 and 8.)

### SAX BACKGROUND AND ENSEMBLE VOICINGS

- 25) Although BLOCK, "A" and "B" voicings can effectively be applied to all situations, including saxes playing background figures and as a section of the ensemble, special note of the 7-3 voicings discussed in Chapter 7 should be made. This approach is very effective WHEN THE RESPONSIBILITY OF THE SAX SECTION (or trombone section) IS NOT TO HARMONIZE THE MELODY, BUT TO PROVIDE BODY AND SUPPORT TO THE ENSEMBLE VOICINGS.

### SPECIFIC PROBLEMS RELATIVE TO FOUR OR MORE

#### PARTS OF DENSITY

- 26) As we have discovered, four part density is the first level of density where a complete chord is defined. With this full harmonic statement, certain basic problems will arise. The first point is the avoidance of any half step interval between the melody note and the harmony note immediately below it.
- 27) Reference point X in Example 528 is a case in point. If I were to utilize a 9 for 1 melodic substitution, I would have the result as shown in Examples 529a and 529b.

Ex. #529a

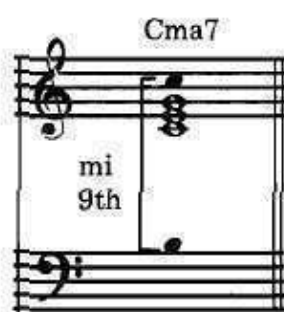


Ex. #529b



- 28) Although the 9 for 1 substitution is valid in the inner voices, the situation would not work here because the melody is the third of the Dmin7th. The use of the 9 for 1 would change the second note from the top from a "D" to an "E," thus creating the half step interval between the "E" and the melody note "F." The minor 7th chord is the most susceptible to this problem because of the lowered third of the minor 7th chord.
- 29) Another problem arises with the instance of a minor 9th interval that is present between ANY TWO VOICES OF A BLOCK, "A" or "B" VOICING. The most prevalent situation involves a Major 7th chord whose root is placed above THE MAJOR 7TH. The use of the Major 7th of the chord as a lower voice automatically forms the minor 9th interval we wish to avoid.

Ex. #530



Ex. #531



- 30) The conclusion here is that WHEN THE ROOT OF A MAJOR 7TH CHORD IS PLACED HIGHER THAN THE MAJOR 7TH, YOU SHOULD REPLACE THE MAJOR 7TH WITH THE 6TH OF THE CHORD. The Major 7th and Major 6th are INTERCHANGEABLE, as shown in Table 1, Chapter 2. Example 532 illustrates the correct way to voice Example 530 using the 6th of the chord instead of the Major 7th.

Ex. #532



**IMPLYING 5, 6 AND 7 PART HARMONY  
WITH FOUR PITCHES**

- 31) We have already established a means of implying larger forms of harmony with fewer notes. The method, which utilizes SUBSTITUTION NOTES, applies to the MELODIES AND INNER VOICES of four part harmony as naturally as it does to three part harmony or density. However, as I have already pointed out, four part harmony more fully defines our chords, and with this more complete definition certain distinctions must be brought out.
- 32) When a melody note functions as some version of an 11th, +11th, 13th or b13th, IT NEEDS THE SUPPORT OF THE 9th, b9th or, more rarely, the +9th. Table 21 below breaks down the possible substitution notes and the correct handling in each case.

TABLE 21

The musical notation in Table 21 illustrates various chord voicings in G major across two systems. Each chord is represented by two staves (treble and bass clef) showing specific intervallic voicings.

**Top System:**

- ma7th:** Treble clef shows intervals  $+1\frac{1}{3}$ ,  $\frac{9}{1}$ ,  $\frac{7}{5}$ . Bass clef shows (x).
- mi7th:** Treble clef shows intervals  $\frac{13}{5}$ ,  $+1\frac{1}{3}$ ,  $\frac{9}{1}$ ,  $\frac{7}{5}$ . Bass clef shows (x).
- dom11th:** Treble clef shows intervals  $\frac{11}{3}$ ,  $\frac{9}{1}$ ,  $\frac{b7}{5}$ . Bass clef shows (x). A box labeled "omit 3rd of chord" spans the dom11th and dom+11th chords.
- dom+11th:** Treble clef shows intervals  $+1\frac{1}{3}$ ,  $\frac{9}{1}$ ,  $\frac{b7}{5}$ . Bass clef shows (x).

**Bottom System:**

- dom+11th:** Treble clef shows intervals  $+1\frac{1}{3}$ ,  $+9\frac{1}{1}$ ,  $\frac{b7}{5}$ . Bass clef shows (x).
- dom13th:** Treble clef shows intervals  $\frac{13}{5}$ ,  $\frac{3}{5}$ ,  $\frac{9}{1}$ ,  $\frac{b7}{5}$ . Bass clef shows (x).
- dom b13th:** Treble clef shows intervals  $\frac{13}{5}$ ,  $\frac{3}{5}$ ,  $\frac{9}{1}$ ,  $\frac{b7}{5}$ . Bass clef shows (x).

32a) See page 238 for application of OPEN FOUR PART VOICINGS, or the "C" voicing.

THE EXAMPLES IN TABLE 21 ARE BASED ON THESE CONCLUSIONS:

- 33) The MINOR 7TH CHORD FAMILY (including min9th, min11th) cannot have an ALTERED 9TH in the melody or as an inner voice (i.e.,  $b9$ th or  $+9$ th).
- 34) The MAJOR 7TH CHORD FAMILY (including Maj9th, Maj9 (+11), Maj13 (+11) ) cannot have an ALTERED 9th (i.e.,  $b9$ ,  $+9$ ) in the melody or as an inner voice. Any use of the diatonic 11th as an inner voice should be raised to become the +11th.
- 35) Dom. 11th chords can have the 9th,  $b9$ th or  $+9$ th as inner voices. IN EACH CASE, THE 3rd OF THE DOM.11TH CHORD SHOULD BE OMITTED (even in another section of the band) TO AVOID THE MINOR 9TH INTERVAL BETWEEN THE 11TH OF THE CHORD AND THE 3RD OF THE CHORD. (Review Paragraph 29.)
- 36) The Dom.+11th chord can have the 9th,  $b9$ th and  $+9$ th as inner voices.

- 37) The Dom. 13th can have the 9th or b9th. If the b9th is used, it leads most naturally to a chord whose root is a perfect 5th (circle of 5ths) lower.

## Ex. #533



- 38) The Dom. 13th (+11) can have the 9th, b9th or +9th as an inner voice.
- 39) The Dom. b13th chord should be supported with the b9th. This specific chord (with the b13/5 and b9/1) leads most naturally to a chord whose root is a perfect 5th (circle of 5ths) lower.

## Ex. #534



- 40) DOUBLE ALTERED chords contain the greatest degree of dissonance and, because of this, good musical judgment should be put forth when considering their use.
- 41) Block voicing and block voicing with the melody doubled an octave lower applies to the altered large chord forms in Table 21. "B" sax section voicings should be avoided for the most part. The reason for this is that the octave lowering of the 2nd or 2nd and 4th voices will often throw an altered tension note (+11th, b9th, +9th) into the baritone or 2nd tenor sax part, destroying the relationship of the chord to its root. The high tension tones (9th, 11th and 13th) need the ADJACENT CLOSED SUPPORT IN THIRDS OF THE TONE IMMEDIATELY BELOW.



- 42) The following 16 measures in concert from the score of *CIRCLELET* illustrates the block usage of the Dom. 13th chord, which is supported by the 9/1.

Ex. #535

SC

Fl  
Fl  
Trpt(Cup)

*mf* 3 Trpts in stand

I, II Trb/Bs Clar

II, III Trb/B. Cl/  
Gtr/Arcs Bs

(Trpts)  
Cl/Alto  
I Trb

I Trpt  
I, II Trb  
Bs Clar

III Trb



- 43) All of the large chord forms found in Table 21 contain various degrees of dissonance. All are characteristic to normal big band writing in the jazz and jazz/rock styles, and in a more limited sense, the rock styles.

#### 4TH STRUCTURES IN OPEN POSITIONS

- 44) Four part density continues the use of the open 4th structures by the addition of another note, a perfect 4th interval away. In four part density the effect of 4ths can be produced WITHOUT adhering to CONSISTENT PERFECT 4TH INTERVALS.
- 45) The following Table 22 states all of the Perfect 4th and Mixed 4th (per. 4th, aug. 4th, maj. 3rd and dim. 4th) combinations and their conventional chord symbol relationships.

TABLE 22

Root	Min.3rd	Maj.3rd
a) C6(9)	b) C13	c) Ami11
d) A <sup>o</sup> 7	e) A <sup>b</sup> 6(9)	
f) F6(9)	g) F7(+9)	h) Fmi6(9)
i) Fmi11	j) E <sup>+</sup> mi11(+5)	
k) Dmi11	l) Dmi11( <sup>b</sup> 5)	m) D <sup>b</sup> ma7(6 <sup>9</sup> )
n) B13( <sup>b</sup> 9)		
o) B <sup>b</sup> 13	p) B <sup>b</sup> mi11	q) Gmi11(6 <sup>9</sup> )r) Gmi11

- 46) The most practical approach to apply the 4th structures shown in this Table is to apply them IN RELATION TO THE FUNCTION OF THE MELODY NOTE. For example, if I wished to voice the melody note Ab (with a 4th structure) to harmonize with a basic given chord symbol Fmi7, my first step would be to determine that the MELODY NOTE FUNCTIONS as the MINOR 3RD OF THE CHORD. Table 22 is set up with headings listing the various 4th structures as they apply to the different melodic functions. Once the function of the melody note is clear, the Table then gives me the voicing in terms of the different parts of the chord that make up the 4th structure.
- 47) The Ab melody note, functioning as the b3rd would then use Illustration (c) from the Table.

Ex. #536



Ex. #537



- 48) Working from only the MELODIC FUNCTION (in this case the b3rd), I could disregard the GIVEN CHORD SYMBOL (the Fmi7) and REHARMONIZE the Ab melody note with Illustration (d), changing the harmonic implication to a form of the Fdim7th.

Ex. 538



- 49) For a further example of the actual use of these 4th voicings, refer to the score of SCUFFLE (see Example 549), measures 105 through 120. The very unique sound created by the consistent use of any of these structures enhances this style of writing and adds an automatic continuity of concept by this consistent, restrictive use.
- 50) As was pointed out in Chapter 14 pertaining to open 4ths in three part density, these structures also lend themselves, in four part density, as harmonizations to a melody based on the Blues Scale. Example 539 illustrates one of many four part possible harmonizations of this Blues Scale melody.

Ex. #539



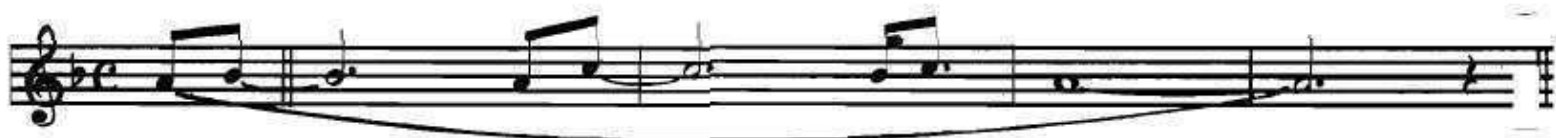
**DIATONIC CLOSED 5TH CLUSTERS**

- 51) Closed 5th Clusters are another four part density effect which has a very musical and sensitive sound. In very stylized situations they are effective in creating and adding certain moods.
- 52) Closed 5th Clusters have a span of a PERFECT 5TH INTERVAL in their original form, although octave, 6th and 3rd couplings may be applied as well.
- 53) The core of this relationship is a MAJOR or MINOR TRIAD. A fourth tone is added exactly a PERFECT 4TH below the melody note. The MAJOR or MINOR TRIAD IS ALWAYS IN ROOT POSITION (i.e., the melody note always functions as the 5th of the triad).
- 54) This addition of the fourth tone to the original triad creates a tight, diatonic sound. The clustered effect is a result of four pitches being placed close together inside a span of a PERFECT 5TH INTERVAL. Another valuable asset to their use is their interchangeability with regular three part closed 4th structures.
- 55) The triad, which is the basis of a Closed 5th Cluster, DEFINES THE CHORDAL AND TONAL RELATIONSHIP OF THE CLUSTER. The added tone, a 4th interval below the melody, will function as a 9th (or 2nd) in relation to the triad.
- 56) Based on the melody of CANTO I (Example 540) you will find the basic TRIAD shape built down from each melody note. Each melody note functions as the 5th of the triad. (See Example 541.) In Example 542 the added tone, a PERFECT 4TH INTERVAL down from the melody note, has been added, completing the Closed 5th Cluster from each melody note.

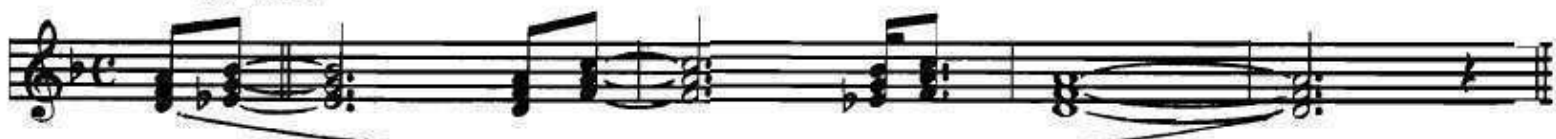
**CANTO I**

Ex. #540

SC



Ex. #541



SC

Ex. #542 (Ex. 540 completed.)



MEASURES 5

6

7

8

**CHROMATIC CLOSED 5TH CLUSTERS**

- 57) When the effect of more chromatic tones is needed, we can take the technique of **CHROMATIC PARALLEL CLOSED 4THS**, and add a **MELODIC COUPLING A PERFECT 5TH BELOW THE MELODY**. This approach is valid regardless of the interior construction of the closed 4th voicing. (see Example 543) based on the melody of Example 491.

Ex. #543

SC

**BASIC TECHNIQUE NO. 12****ORCHESTRATING CLUSTERS**

- 58) Because of the closeness between notes in this cluster, certain orchestral solutions will be more musical and blend better than others. This orchestration is, of course, dependent on the particular **REGISTER** and **SOUND** you wish, but a couple of basic premises should be maintained.
- 59) Any orchestration of a **CLOSED 5TH CLUSTER** should be approached from this point of view: any consonant interval relationship within the voicing should be orchestrated with one **INSTRUMENT FAMILY** (i.e., trumpets, trumpets and flugelhorns, trombones, saxes or woodwinds). The extra tone providing the "cluster" effect should then be orchestrated by an instrument or instruments from another instrument family, or with another quality. The melody could also be doubled in prime unison or in the octave in this second instrument family.
- 60) The following isolated voicing from Example 542 could therefore be handled in one of these ways:

Ex. #544a

Original voicing:



Ex. #544b

Consonant interval relationship:



Ex. #545

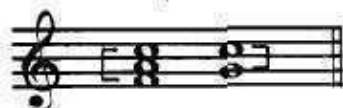
Extra tone and optional melody coupling:



Ex. #546

1st Orchestration:

3 trpts

2 clars, or  
2 altos, or  
2 tenors

Ex. #547

2nd Orchestration:

2 flutes

2 trpts  
in cups

Ex. #548

3rd Orchestration:

3 trbs



2 clars

### ORCHESTRAL POSSIBILITIES APPLIED TO FOUR PART DENSITY

61) Four part density can apply to the following orchestral situations:

- a) Small Groups of Four Horns. Some typical ROCK or JAZZ COMBO instrumentations are —

**ROCK:**

1) Trumpet  
Trumpet  
Trumpet  
Trombone  
Tenor or  
Baritone

2) Trumpet  
Trumpet  
Trombone  
Trombone

**JAZZ:**

3) Trumpet  
Alto  
Tenor  
Baritone

4) Trumpet  
Tenor  
Trombone  
Baritone

5) Alto  
Alto  
Tenor  
Baritone

6) Tenor  
Tenor  
Tenor  
Baritone

- b) Four Horn Sections of a Band —

1) Four Trumpets      2) Four Trombones      3) Four Saxes      4) Four Woodwinds

- c) Ensemble Voicings in Four Part Density (See Chapter 18)

1) All the implications of BASIC INSTRUMENT RANGES, Tables 15 and 16, as well as TYPICAL RANGES OF VARIOUS SECTIONS OF A BAND (See Chapter 14) apply here.

62) ALL SOURCES OF FOUR PART DENSITY COVERED IN THIS CHAPTER WOULD APPLY TO THE ABOVE INSTRUMENTAL COMBINATIONS.

### MIXING ONE, TWO, THREE AND FOUR PART DENSITIES

63) As I have pointed out in previous chapters, the INTERCHANGEABILITY of different levels of density play an important role in attaining FRESHNESS OF CONCEPT, ADAPTABILITY OF THEMATIC IDEAS and FLEXIBILITY WITH REGISTERS.

64) When an arranger orchestrates a melodic phrase he now has four levels of density with which to CONTROL the factors of WEIGHT, REGISTER, CONTRAST, HARMONIC SOURCES and RHYTHMIC CONSIDERATIONS. In the following examples illustrating MIXED LEVELS OF DENSITY AND SPAN OF ORCHESTRATION, this procedure will be used to designate the LEVEL OF DENSITY and SPAN OF ORCHESTRATION:  $\frac{1}{1} ; \frac{2}{2} ; \frac{4}{3} ; \frac{3}{5}$ .

$\frac{1}{1} ; \frac{2}{2} ; \frac{4}{3} ; \frac{3}{5}$

65) THESE NUMBERS DO NOT IMPLY FRACTIONS IN ANY SENSE. Instead,

1 : The upper number always defines the LEVEL OF DENSITY (in this case, one part density).

2 : The lower number always defines the SPAN OF ORCHESTRATION in octaves.

a) Prime unison is designated ZERO span, or 0

b) 1 indicates the span is approximately one and a half octaves.  
1½

c) 1 indicates an interval of a 9th or 10th.  
1+

d) 2 indicates a span of TWO OCTAVES plus a step or 3rd interval.  
2+

(3+, 4+, etc. would mean three or four octaves plus a step or third interval.)

66) Example 549 from the score of SCUFFLE would be analyzed using the procedure just explained.

Ex. #549

SC

The musical score for Example 549 from the score of SCUFFLE is presented in five systems, each with a treble and bass staff. The key signature is one flat (B-flat major or D minor). The time signature is 4/4.

- System 1 (Measures 106-107):** Measure 106 is marked with a '1' above the staff and '(106) (flug.hrn 1st trb.)'. Measure 107 is marked with '(107)'.
- System 2 (Measures 108-110):** Measure 108 is marked with '(108)'. Measure 109 is marked with '(109)'. Measure 110 is marked with '(110)'.
- System 3 (Measures 111-113):** Measure 111 is marked with '(111)'. Measure 112 is marked with '(112)'. Measure 113 is marked with '(113)' and includes a box 'X' with the text '+2,3 trpt. (or flug.hrns)'.
- System 4 (Measures 114-116):** Measure 114 is marked with '(114)'. Measure 115 is marked with '(115)' and includes a box 'Z'. Measure 116 is marked with '(116)'.
- System 5 (Measures 117-120):** Measure 117 is marked with '(117)'. Measure 118 is marked with '(118)' and includes a box 'Y'. Measure 119 is marked with '(119)'. Measure 120 is marked with '(120)' and includes the text '(+ 4 trpt)'.

The score includes various musical notations such as notes, rests, and dynamic markings. The key signature is one flat (B-flat major or D minor). The time signature is 4/4.



- 67) This example of a portion of SCUFFLE is quite unique. It contains and illustrates some basic, consistent premises that are important to you from this standpoint: they give you a flexibility of concept and technique that represents a whole world of voicing approaches, resulting in a versatility in all styles of writing.

RELATE THESE CONCLUSIONS TO EXAMPLE 549:

- 68) By the use of DENSITY a most effective choice of notes is used TO FIT A SPECIFIC REGISTER and RHYTHMIC SITUATION (i.e., this control of density allows the choice of voicing that enables your instruments to "speak" in their most effective natural ranges regardless of the register of the melody.
- 69) The variation of DENSITY and SPAN OF ORCHESTRATION automatically provides a stimulating contrast of harmonic texture and variety of effects.
- 70) The addition of instruments (reference points X and Y add WEIGHT and SPAN to the orchestration WITHOUT ADDING DENSITY. This creates a building, exciting momentum without sacrificing the control of density, thereby allowing the figures to "swing." Too much saturation of density works in just the opposite way.
- 71) The voicing approach allows a control over the bottom voice of a voicing (see reference point Z in Example 549), adding a more musical dimension to the overall effect.
- 72) My notation of density and span of orchestration (i.e.,  $\frac{1}{1}$ ) presents you with a concise, accurate measurement of these two critical factors, not only as an aid to developing your own voicings, but as an analytical procedure to learn from other writer's examples. It is a measurement of the two creative factors that are responsible for all the effects we can conceive, thereby giving us the means to specifically pinpoint and categorize each effect.





## SECTION IV — DENSITY

### Chapter 16: Five Part Density

- 1) Five part density goes a step further than four part density in producing a full harmonized effect. The reason for this is the unavoidable addition of extensions of the chord. To obtain the fifth different pitch, some use of a 9th, 11th or 13th or a chord is necessary.
- 2) Therefore, five part density assumes its own individuality in the sense that, as a writer, you must always be conscious of the more involved harmonic implications that make up five part voicings.
- 3) Five part density has such a fullness of harmony and tension that great care must be taken in determining WHERE to use it. We have seen from the detailed discussions of one, two, three and four part densities, that in a great number of situations the most musical or stylistic solution is often a four part density, or less.
- 4) Four part BLOCK, "A" or "B" voicings are vital because they are conceived by BUILDING THE VOICING DOWN FROM THE MELODY NOTE. Therefore, Block, "A" and "B" voicings FOLLOW THE MELODY. In this sense they are so many MELODIC COUPLINGS. The result of using Block, "A" or "B" voicings is that the harmony always takes on the flow and contour of the melody. This great attribute allows these voicings the same flexibility and thrust that a melody has. MELODY STILL REMAINS THE PRIMARY EFFECT.
- 5) Five part density assumes an entirely different importance. The primary effect is HARMONY rather than melody or rhythm. Consequently, its use must be more carefully considered. The most valuable uses of five part density would include:
  - a) Harmonization of ballads and slower moving melodic phrases;
  - b) Background voicings motivated by the slower rhythm of the chords instead of the melody;
  - c) Voicing effects in styles OTHER THAN ROCK (in most cases). There is much use of five part density in JAZZ/ROCK conceptions;
  - d) Harmonization of jazz lines.
- 6) In many cases, if the rhythm of a voicing phrase is too rapid, the effect of five part density is wasted. It goes by too fast to be effective. The longer the voicing is held, the longer the ear is able to absorb the texture and richness of the voicing. It is always possible and completely logical to mix the four and five part levels of density when faster rhythms are involved.
- 7) As all our music makes either MELODY, HARMONY or RHYTHM the primary factor, five part density takes its place as a sound and technique to be used only when HARMONY IS THE DESIRED PRIMARY FACTOR OR EFFECT.

## 8) THE SOURCES OF FIVE PART DENSITY ARE:

- a) Open five part chord voicings;
- b) Special five part voicings;
- c) Diatonic clusters.

9) We have already defined Block voicing as a "closed position" voicing whose SPAN is not over an octave. In five part harmony the majority of applications will be in open voicing (the span will be greater than an octave). Because five part density now involves the use of EXTENSIONS OF THE CHORD (i.e., 9ths, 11ths and 13ths) it is most essential that you have a clear understanding of HOW TO VOICE OPEN FIVE PART CHORDS WITH RESPONSIBLE USE OF THE EXTENSIONS.

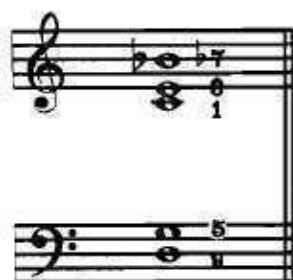
10) The extensions of a chord function correctly IN RELATIONSHIP to the basic tones of a chord (i.e., root, 3rd, 5th and 7th). A lower pitched BASIC TONE will always be stronger than an extension because of the strength of its overtones. Therefore, we can conclude that 9ths, 11ths and 13ths should never be voiced IN THE BOTTOM TWO PARTS OF open five part density.

11) To illustrate this point, Example 550 shows a five part voicing of a C9th chord. (See Example 550.) If the 9th were placed in the bottom voice, we would have this version. (See Example 551.)

Ex. #550



Ex. #551



12) The reason Example 551 sounds wrong and NOT like a C9th is this: a 9th of a chord in the bottom voice will always CHANGE ITS CHORD RELATIONSHIP. Example 551 is really trying to sound like some form of a Gmin13th chord. The point is that although we may THINK we are voicing the 9th of a C dominant chord on the bottom, it will, in fact, always SOUND like a basic tone, a root or fifth, OF ANOTHER CHORD (in this example, a Gmi13th). Consequently, this change of chord sounds wrong in a situation where we wish to HEAR THE ORIGINAL CHORD.

13) The following techniques may be used to voice five part open chords.

## BASIC TECHNIQUE NO. 13

## INVERSIONS OF OPEN FIVE PART CHORDS

- 14) One approach to open five part chords separates the **ROOT OF THE CHORD FROM THE REMAINING FOUR TONES**. These remaining four tones voice in a **CLOSED POSITION** (a span of an octave or less). The addition of the root below the four tones extends the overall span to be more than an octave, thus creating five part open harmony. Examples 552-555 illustrate this approach applied to a G9th chord.

SC

Ex. #552, 553, 554, 555

- 15) Example 552 is the basic arrangement of notes defining a G9th chord. The top four notes (the 9th, 7th, 5th and 3rd) are in a closed position. The root (a 10th interval below) is voiced by itself and is separated by any interval as small as a third or as large as a 10th. The register the root is placed in is dependent on preceding chords and the specific effect or sound you wish.
- 16) The 9th, 7th, 5th and 3rd of the chord can be inverted (see Exs. 553-555), allowing any of these tones to represent the melody note. This flexibility with the 9th, 7th, 5th and 3rd is therefore quite important when harmonizing a melody. The fact that these tones of the chord are grouped in a closed position gives the tension notes a great deal of support from the 7th, 5th and 3rd.

PLURALITY

- 17) You will notice, in this voicing approach, that the top four chord tones, inverting independently from the root, take on the shape and identity of four part 7th chords. (Review Chapter 9.) An awareness here of the **PLURAL** factor will speed up your facility in writing.
- 18) The following examples of **MELODIC POSSIBILITIES** on Major, Minor 7th, Dominant, Minor 6th and Diminished 7th chords can be used to exemplify this approach applied to the following chord families. (See Table 23.)
- 18a) At points A and B in **TABLE 23**, an alternate voicing is possible. The **ALTERNATE SOLUTIONS** are made possible by reverting to a four part density when the **THIRD OF A MINOR CHORD IS IN THE MELODY**. The **ALTERNATE SOLUTIONS** to use are shown along side points A and B, in parentheses.

TABLE 23

Diagram illustrating musical concepts and chord progressions, labeled TABLE 23.

**Chord Progressions and Fingerings:**

- Cmaj9:** Chord progression with fingerings: 9 7 5 3, 3 9 7 5,  $+11/3$  9 7 5, 5 3 9 7, 7 5 3 9.
- Dmi9 [A]:** Chord progression with fingerings: 9 7 5 3, 3 9 7 5,  $11/3$  9 7 5, 5 3 9 7, 7 5 3 9.
- G9:** Chord progression with fingerings: 9 7 5 3, 3 9 7 5,  $11/3$  9 7 5,  $+11/3$  9 7 5, 5 3 9 7,  $11/3$  9 7 5, 7 5 3 9.
- Cmi6(9):** Chord progression with fingerings: 8 9 6 5,  $11/3$  9 6 5, 5 3 9 7, 6 5 3 9, 9 6 5 3.
- Cmi maj9:** Chord progression with fingerings: 3 9 7 5,  $11/3$  9 7 5, 5 3 9 7, 7 5 3 9, 9 7 5 3.
- Dim 7ths:** Chord progression with fingerings: 9 7 5 3, 9 7 5 3, 9 7 5 3, 9 7 5 3.

**Chord Labels and Extensions:**

- Cmaj9**
- Dmi9 [A]**
- G9**
- Cmi6(9)**
- Cmi maj9**
- A<sup>o</sup>7 (add B)**
- C<sup>o</sup>7 (add D)**
- E<sup>b</sup>o7 (add F)**
- F<sup>#</sup>o7 (add G)**

**Diagram Labels:**

- [A]**
- [B]**
- [B]**
- [C]**
- [C]**
- [C]**
- [C]**

- 19) Voiceleading principles as outlined in Chapter 7 apply to inversions of five part chords. In this application, the top four voices would voicelead (honoring common tones) while the root in the 5th voice moves independently. The voiceleading of the top four voices would be like Examples 323 through 330.

#### WE MAY NOW ARRIVE AT THESE CONCLUSIONS:

- 20) All four inversions of the 3rd, 5th, 7th and 9th of a Major 9th chord are possible.
- 21) A  $+11/3$  substitution can be applied to the Major 9th chord.
- 22) Any position of a Minor 9th chord is practical, except when the 3rd of the chord is in the top voice (see Table 23, reference point A) creating a  $1/2$  step dissonance with the 9th. (Review Chapter 15, Examples 529a to Paragraph 29.)
- 23) A  $11/3$  melodic substitution can be applied to the minor 9th chord.
- 24) All positions of a dom. 9th or dom. 7(b9) chord are practical. The dom. 7 (+9) works best with the +9 in the melody.
- 25) A  $+11/3$ ,  $11/3$ ,  $13/5$  and  $b13/5$  (supported by a  $b9/1$ ) substitution can be applied to dominant chords.
- 26) All positions of a  $Cmi6(9)$  or  $CmiMa9$  chord are practical, with the exceptions of the 3rd in the melody (see reference point B, Table 23).
- 27) A diminished 7th chord can be extended to include the tone a Major 9th interval above the root. These five pitches can now function as five part density. Each "inversion" is actually a new chord rather than a "strict inversion." This is due to the symmetric relationship of the diminished chord and because the added 9th is a NEW TONE, derived from whatever root is used. (See reference point C, Table 23).
- 28) The most effective MELODY CONCERT RANGE to use in applying this technique of voicing DIMINISHED 7th CHORDS WITH FIVE PART DENSITY would be:

Ex. # 556



- 29) When the melody enters this range:

Ex. #557



five part density can be handled by the following Basic Technique No. 14 approach.

**BASIC TECHNIQUE NO. 14****OPEN FIVE PART VOICINGS**

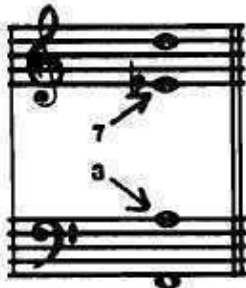
- 30) This technique is the most used and valuable approach to construct a more open five part voicing. This concept does not assume the 3, 5, 7 and 9th to be in a closed position (less than an octave span).
- 31) These decisions need to be made to construct an open five part voicing:
- Specific placement of the melody note;
  - Specific placement of the root of the chord;
  - Addition of the 7th (or 6th) and 3rd of the chord; if not already present as the melody note;
  - Addition of a tension note (9th, 11th or 13th) or addition of the 5th of the chord.

- 32) Following this procedure to voice a F13th chord with "D" as the melody note, I would:

- Determine the placement of the melody note: (See Ex. 558)
- Determine the placement of the root: (See Ex. 558)

**Ex. #558**

- Add and determine the placement of the 7th and 3rd of the chord: (See Ex. 559)

**Ex. #559**

- d) Add a tension note (9th) or 5th: (See Ex. 560)

Ex. #560



- e) In this case, the 13th in the melody is functioning as a 13/5 melodic substitution, eliminating the addition of the 5th.

33) **YOU SHOULD BE AWARE OF THESE CONSIDERATIONS:**

- a) The top four voices will not blend satisfactorily if an interval of more than a 6th separates the notes;
- b) The distance from the root to the closest note can be up to a 10th interval;
- c) Try to keep any tension note (9th, 11th or 13th) in the top three voices;
- d) Support dominant 13th chords with a 9th or b9th;
- e) Support dominant b13th chords with a b9th;
- f) Make sure ANY ALTERED TONE in the chord is present;
- g) Adhere to all voiceleading principles as discussed in Chapter 7.

### CONCLUSIONS

- 34) Voiceleading principles discussed in Chapter 7 apply to the top four voices of open five part voicings.
- 35) By following the step-by-step procedures outlined in this basic technique you will automatically determine all the essential factors in the order of their overall importance.
- 36) In most five part open chord voicings the root is most effective in the lowest voice. Inversions of five part open chords can also be quite effective, but must be carefully voiced.



### 3RD, 5TH AND 7THS IN THE BOTTOM VOICE

- 37) In most cases, the same considerations outlined in Basic Technique No. 14 will apply to voicings using the 3rd, 5th or 7th of the chord in the bottom voice. The same functions of the chord need to be present. The main adjustment is the use of the remaining BASIC TONES IN THE VOICES IMMEDIATELY ABOVE THE BOTTOM VOICE. The following example shows some possible voicings utilizing either the 3rd, 5th or 7th of the chord in the bottom voice. (Ex. 561-566.)

Ex. #561      Ex. #561a      562,      563,      564,      565,      566

Ex. #561: C6(9) - Treble: C4, E4, G4, A4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 5, 3, 9, 3.

Ex. #561a: C6(9) - Treble: C4, E4, G4, A4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 5, 3, 9, 3.

562: Bb6(9) - Treble: Bb4, D5, F5, Ab5, Bb5; Bass: Bb3, F2, Bb3, F2, Bb3. Fingering: 9, 8, 3, 6, 3.

563: Bbm9 - Treble: Bb4, D5, F5, Ab5, Bb5; Bass: Bb3, F2, Bb3, F2, Bb3. Fingering: 9, 8, 3, 6, 3.

564: C9 - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 5, 3, 9, 3.

565: F13 - Treble: F4, Ab4, C5, Eb5, F5; Bass: F3, C2, F3, C2, F3. Fingering: 1, 3, 9, 7, 5.

566: F13 - Treble: F4, Ab4, C5, Eb5, F5; Bass: F3, C2, F3, C2, F3. Fingering: 1, 3, 9, 7, 5.

- 38) The higher the voicing, the better it will sound. The lower the voicing, the more likely it is to sound muddy and ineffective.

### ROOTS IN THE MELODY

- 39) Our approach in both Basic Technique Nos. 13 and 14 has been to place the root in the lowest voice. Obviously when the root IS the melody note, we would then be doubling the root, changing the voicing to four part density. This is not necessarily less effective, because it is a strong sound and four and five part densities mix extremely well.
- 40) The following examples will give you some specific FIVE PART VOICINGS to use when voicing the root in the melody on major and dominant chords.

Ex. #567      568      569      570      571      572      573

Ex. #567: C13 - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 3, 9, 7, 5.

568: C9 - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 3, 9, 7, 5.

569: C13 - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 3, 9, 7, 5.

570: C7(b9) - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 3, 9, 7, 5.

571: C7(+9) - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 3, 9, 7, 5.

572: C13 - Treble: C4, E4, G4, Bb4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 3, 9, 7, 5.

573: C6(9) - Treble: C4, E4, G4, A4, C5; Bass: C3, G2, C3, G2, C3. Fingering: 1, 5, 3, 9, 3.

Dom ————— Maj



- 41) Review Example 353 in Chapter 8 from my chart CAN'T BELIEVE IT BLUES. Relate the application of the previous techniques to the voicings in this example. You will notice several four part voicings. These, of course, mix perfectly well with the five part voicings. MINOR 7TH CHORDS WITH THE ROOT, 3RD, 5TH OR 7TH IN THE MELODY ARE BEST HANDLED IN FOUR PART DENSITY RATHER THAN IN FIVE PART. This is due to the half step relationship between the minor 3rd and the 9th of the minor chords.
- 42) Notice also the free use of passing and substitution chords when five part density is applied. The reason for this is the basic premise of OPEN HARMONY. These voicings DO NOT function as MELODIC COUPLINGS like Block, "A" and "B" voicings. Therefore, the voiceleading of the inner voices is dependent on the NEW NOTES introduced by the added passing and substitution chord.
- 43) A detailed discussion of passing chords and their sources can be found in Chapter 8. An in depth study of substitution chords is covered in my Encyclopedia of Basic Harmony and Theory Applied to Improvisation on All Instruments, Volume III, Lessons 22 (Part 1 and 2).

#### SPECIAL FIVE PART VOICINGS

- 44) The following examples can be used as a reference source of effective special voicings that lend themselves to five part density. These voicings are presented by CHORD FAMILY and can be transposed to all keys for a complete reference source.
- 45) Special note of the chord function of the melody and bass tones will help you recognize and apply these voicings in your own writing.

TABLE 24

SC

Table 24 displays 33 measures of musical notation, organized into four systems. Each measure is numbered (1) through (33) and includes chord symbols and voicings for both treble and bass staves. The notation includes various chord extensions and alterations, such as 9ths, 11ths, 13ths, and 7ths, as well as specific voicing instructions like "4 Part".

**System 1 (Measures 1-7):**

- Measures 1-3: C6(9)
- Measures 4-6: C6(9)7
- Measure 7: C13(+11)

**System 2 (Measures 8-14):**

- Measures 8-10: Dmi 11
- Measures 11-14: Cmi6(9) Cmi ma<sup>6</sup>9(7)

**System 3 (Measures 15-25):**

- Measures 15-17: G 13
- Measures 18-19: G7(+9) G7(b9)
- Measures 20-21: G9(+11)
- Measures 22-23: G 13 G9
- Measures 24-25: (G7b9) G+7(+9) G13(+11) G13(b9)

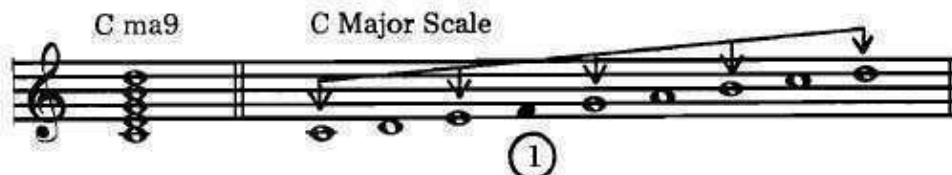
**System 4 (Measures 26-33):**

- Measures 26-28: Dmi 11(b5)
- Measures 29-30: Dmi7(+5)
- Measures 31-33: F<sup>#</sup>07 (add A) A<sup>0</sup>7 (add C) C<sup>0</sup>7 (add D) E<sup>b</sup>07 (add F)

### FIVE PART DIATONIC CLUSTERS

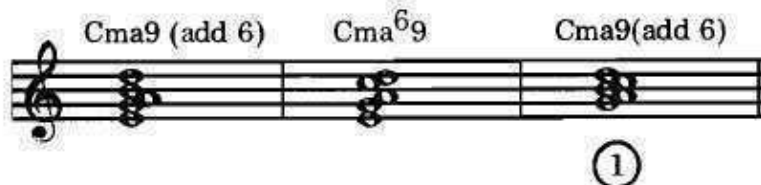
- 46) A DIATONIC CLUSTER is best described as a stylistic effect produced by two factors.
- Restriction of the span (of different pitches) of the voicing to as thin as a PERFECT 5TH and as deep as a MINOR or MAJOR 7TH. This does not effect the optional use of octave couplings of any of the notes involved.
  - Clustering the pitches in combinations of 2nd and 3rd intervals.
- 47) This selection of notes is determined by identifying the SCALE FROM WHICH THE BASIC CHORD IS DERIVED.
- 48) For example, a Cmaj9th chord has as its scale source, a C Major scale.

Ex. #574



- 49) Any of the notes in a C Major scale can be played vertically with the exception of the 4th degree of the scale (see reference point 1). Therefore, if "D" was my melody note, I could use adjacent scale tones VERTICALLY to achieve these results:

Ex. #575



- 50) Reference point 1 brings out the possibility of half-step intervals between notes in the cluster. Obviously, the dissonance created must be carefully considered. I would suggest you do not indiscriminately use these half-step relationships without playing them first. **DO NOT USE A HALF STEP BETWEEN THE MELODY AND SECOND VOICE.**
- 51) The same approach used in Examples 574 and 575 will apply to other melody notes in the C Major scale (or any scale that plays through your given basic chord).
- 52) The following Tables 25 and 26 define at least one of the possible scale sources for all the practical chord forms. By determining the SCALE SOURCE for a specific chord form you can proceed to harmonize a given melody note in a DIATONIC CLUSTER by confining the SPAN OF THE VOICING from a 5th to a 7th.

- 53) Table 25 contains chords that are diatonic to, and function in, the KEY OF C MAJOR.
- 54) The classification at the top (I major, I major. alt., etc.) refers to the way all the chord forms in that column function in the key of C major. Each horizontal column represents 3, 4, 5, 6 and 7 part chords. All the chord forms in one vertical column are considered related to each other in their basic construction and in the way they FUNCTION in the key of C major. THIS, THEN, FORMS A CHORD FAMILY. EACH CHORD FORM IS INTERCHANGEABLE WITH EVERY OTHER CHORD FORM IN THE SAME CHORD FAMILY.
- 55) The same format holds true in each vertical column in both Tables.

TABLE 25

## KEY OF C MAJOR:

I Major		I Major alt.	Related Chords	IImi7	Related Chords	IV Major	IV Major alt.	Related Chords	V7	Related Chords
C(1)	C, b5(4)	or #4		Dmi	(1-15)	F(1)	F, b5(1)		G(1-17)	
Cma7(1)	Cma7, b5(4)	or #4		Dmi7	(1-15)	Fma7(1)	Fma7, b5(1)		G7(1-10)	
C6(1)	Cma7, #5(5)					F6(1)			G+7(8)	
	C6, b5(4)	or #4								
Cma9(1)	Cma9, b5(4)	or #4		Dmi9	(1-15)	Fma9(1)	Fma9, b5(1)		G9(1-10)	
	Cma9, #5(5)									
	Cma9, b5, #5(7)									
C69(1)	C69, b5(4)	or #4				F69(1)	F69, b5(1)			
Cma9, +11				Dmi11	(1-15)	Fma9, +11			G11(1-15)	
(4)						(1)				
Cma13, +11				Dmi13	(1-15)	Fma13(+11)			G13, +11(13)	
(4)						(1)				

## SCALE SOURCES

- 56) Numbers in parentheses are used to identify each scale source. In Tables 25 and 26 you find these numbers in parentheses alongside each chord symbol, i.e., under I Major above, in Table 25 you will find the Chord C, and alongside that, in parentheses, you will find (1).
- 57) This means that (1) the I major scale plays through the C Chord, i.e., the C Major scale plays through the C Chord.
- 58) Further down in the column headed I Major you find number 4 in parentheses, (4), alongside the Cma9, +11 and Cma13, +11 chords. This means that (4), the I Lydian Modal Scale can play through these two chords.
- 59) All Altered Dominant Chords are considered V Chords in a Minor key.
- |                                |                                  |
|--------------------------------|----------------------------------|
| (1) I major scale              | (13) II melodic min. scale       |
| (2) I harmonic min. scale      | (14) V Locrian mode              |
| (3) I melodic min. scale       | (15) II Dorian mode              |
| (4) I Lydian mode              | (16) VII diminished 8 note scale |
| (5) VI harmonic min. scale     | (17) VII Locrian mode            |
| (6) IV harmonic min. scale     | (18) IV melodic min. scale       |
| (7) VI melodic min. scale      | (19) II harmonic min. scale      |
| (8) V whole tone scale         | (20) II Aeolian mode             |
| (9) V dominant 8 note scale    | (21) IV major scale              |
| (10) V blues scale             | (22) IIb melodic min. scale      |
| (11) VIb melodic min. scale    | (23) IV Dorian mode              |
| (12) I diminished 8 note scale |                                  |

TABLE 26

## KEY OF C MINOR:

V7, alt.	I minor	I min.alt	II mi7, b5	IVminor	VII <sup>b</sup>
Related Chords	Related Chords		Related Chords	Related Chords	Related Chords
G+ (8)	Cmi (2)	Cmi, #5(22)	Dmi, b5(18)	Fmi (18)	B <sup>b</sup> (16)
G7, b5(8)	Cmi6(3)		Dmi7, #5 (18-20-21)	Fmi6(18)	B <sup>b</sup> 7(16)
	Cmin, Ma7 (3) (12)	Cmi, ma7, #5 (12)	Dmi7, b5 (2-18)	Fmi7(23)	
G9, b5(8) G7, b9(9) G7, b5, b9 (9) G7, #9(9) G7, b5, #9(9) G7, b9, #9(9-10) G7, b5, b9, #9(9) G+7, b9(11) G+7, #9(11) G+7, b9, #9(11)	Cmi, ma9 (3)  Cmi69(3)		Dmi9, b5, +5 (3-18) Dmi9, b5 (18) Dmi9, #5 (18) Dmi9, b5, #5 (18)	Fmi9(23) Fmi69(23)	
G11, b9 (18)  G11, #9 (18) G11, b9, #9 (18) G+9, +11 (8)  G+7, b9, #9, +11 (11)	Cmi, ma11 (3)		Dmi11, b5(18)  Dmi11, #5(18)  Dmi11, b5, #5 (18)	Fmi11(23)	
G13, #9, +11(9) G13, b9, +11(9) G13, b9, #9, +11 (9) G9, b13 (3-8) G7, b9, b13 (11) G7, #9, b13 (11) G7, b9, +11, b13 (11) G7, #9, +11, b13 (11) G7, b9, #9, +11, b13 (11)	Cmi, ma13 (3)			Fmi13(23)	

## 60) \*SPECIAL NOTE:

When more than one scale source number is given (i.e., 1-15) the meaning is always that only those two specific scales are to be used . . . it does not mean 1 through 15.

61) The SCALE SOURCES listed at the bottom of Table 25 give the SCALE DEGREE that each scale is built from, IN RELATION TO THE KEY OF C MAJOR OR MINOR.

62) When dealing with chord forms in other keys, transpose the relationships from C MAJOR AND MINOR to find the corresponding SCALE SOURCES.

63) Example 574 illustrates how to determine a DIATONIC CLUSTER from the I Major chord family. The important point was to omit the use of the 4th degree of the scale. Below you will find similar explanations for the remaining chord families. Each black note head represents the scale degree to BE OMITTED, if that particular chord family requires it.

64) II<sup>mi</sup> 7th (MINOR 7th) CHORD FAMILY:

Ex. #576

**II<sup>mi</sup> 7th (Minor 7th) Chord Family**

D<sup>mi</sup>9      C Major, D Dorian Scale

65) V7 (DOM. 7TH) CHORD FAMILY (Key of C Major):

Ex. #577

**V7 (Dom. 7th) Chord Family (key of C Major)**

G9      C Major Scale

66) I MINOR CHORD FAMILY:

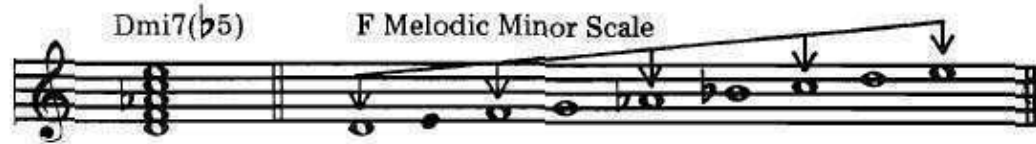
Ex. #578

**I Minor Chord Family**

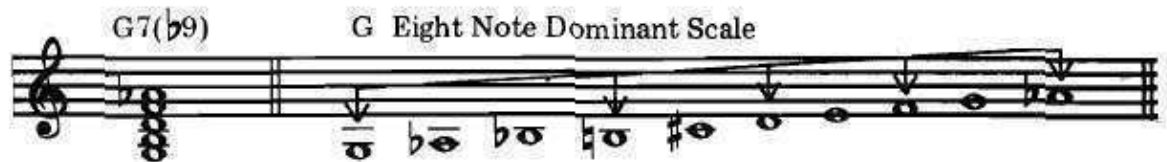
C<sup>mi</sup> ma9      C Melodic Minor Scale

67) II MINOR 7TH (b5) (MINOR 7TH) (b5) CHORD FAMILY:

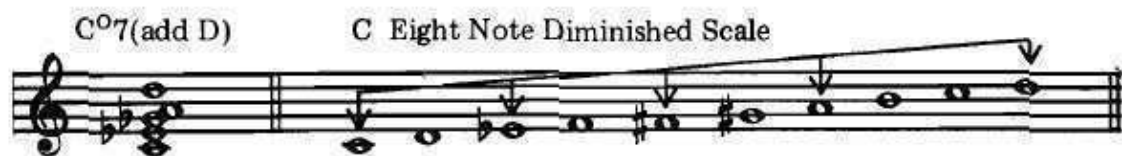
Ex. #579

II MINOR 7th(b5) (MINOR 7th(b5) CHORD FAMILY:68) V7 ALT. (DOM. 7TH, ALT.) CHORD FAMILY (Key of C Minor):

Ex. #580

V7 Alt.(Dom.7th,Alt.) CHORD FAMILY (key of C MINOR):69) DIMINISHED 7TH CHORD FAMILY:

Ex. #581

DIMINISHED 7th CHORD FAMILY:



### ORCHESTRATING DIATONIC CLUSTERS

- 70) The same approach applies to the orchestration of five part diatonic clusters as was detailed in Chapter 15 regarding CLOSED 5TH CLUSTERS. (Review Examples 544a through 548.) The basic difference is that we are now involved with an additional tone.
- 71) The distribution of five pitches to create consonant relationships in individual instrument families holds true. However, the span of the cluster is restricted to a 7th interval.
- 72) The following example from CANTO II illustrates this process:

Ex. #582



Ex. #583



- 73) The critical point in the orchestration of this example is that the half-step between Ab and G was orchestrated so that each of the two notes was assigned to a different instrument family. (See BASIC TECHNIQUE NO. 12, page 251.)

### ORCHESTRAL POSSIBILITIES APPLIED TO FIVE PART DENSITY

- 74) Five part density can apply to the following orchestral situations:
- 75) Small groups of five horns. Some typical jazz combo instrumentations would be:

a) Trumpet	b) Trumpet	c) Trumpet
Alto	Trumpet	Alto
Tenor	Alto	Alto (or Tenor)
Trombone	Tenor	Tenor
Baritone	Baritone	Baritone

- 76) Some typical rock instrumentations would be:

a) Trumpet	b) Trumpet
Trumpet	Trumpet
Trumpet	Trombone
Trombone	Trombone
Trombone	Baritone

- 77) Five horn sections of a band:

- Five trumpets (occasional use of OPEN five part density)
- Five trombones (optional four trombones and tuba)
- Five saxes (alto, alto, tenor, tenor and bary, optional soprano sax, alto, tenor, tenor and bary)
- Five woodwinds (see possible woodwind instrumentations in Chapter 14, Paragraphs 111 to 115.)



- 78) Ensemble voicings in five part density. (See Chapter 18.)
- a) All the implications of BASIC INSTRUMENT RANGES, Tables 15 and 16 as well as TYPICAL RANGES OF VARIOUS SECTIONS OF A BAND (see Chapter 14) apply here.
- 79) ALL SOURCES OF FIVE PART DENSITY COVERED IN THIS CHAPTER WOULD APPLY TO THE ABOVE INSTRUMENTAL COMBINATIONS, WITH THE EXCEPTION OF MOST OPEN VOICINGS APPLIED TO THE TRUMPET SECTION.

### MIXING ONE TO FIVE LEVELS OF DENSITY

- 80) The same flexibility applies to the mixing of one to five levels of density as to one to four levels, as was demonstrated and explained in Chapter 15.
- 81) The basic premise is that as long as the individual voices lead in a natural, logical way and the orchestration involves the effective ranges of the instruments being used, the mixing of the levels of density is as valid as the use of consistent densities.
- 82) Example 584 shows the application of this approach. In this excerpt from FOOLS RUSH IN, the five saxes play an ascending melodic line. Starting with a one part density, a descending bass line forms an increasing span between the two outside voices. This example (as indicated by the numbers above each melody note) expands from one part density to three, four and five levels of density.

Ex. #584

5 SAXES:

- 83) In a similar approach, the mixing of levels can be applied to all sections or groups of instruments and combinations of ensemble voicings.



## SECTION IV — DENSITY

### Chapter 17: Six, Seven and Eight Part Density

- 1) Six, seven and eight part densities are saturated harmonic effects. Their usage is quite special, and because of this should not be overdone. The most typical musical styles that characteristically make use of these advanced harmonies are the jazz and jazz/rock idioms.
- 2) These chord forms and voicings require a thorough understanding of the area of basic harmony that defines the possible alterations of chords and the registers that the higher extensions of a chord may be written in.
- 3) Six part density is used more than the possible seven and eight levels of density. The effect of six part will, in most cases, provide all the harmonic saturation needed. Don't make the mistake of relating the higher levels of density to fullness and a "big sound." Of course, they sound big and full, but four, five and six part density can also sound very full. The real determining factor is how the chords are voiced. Writing in the effective registers, good orchestration and wise judgment in regards to the tempo, rhythmic pattern, style and length of use are equally important.
- 4) The use of the higher levels of density involve six to eight brass or ensemble voicings or the combination of trombones and saxes (or woodwinds). The sheer weight of so many instruments plus the huge harmonic implications of so many different pitches magnify the responsibility of these large chord forms.
- 5) THE SOURCES OF 6, 7 AND 8 PART DENSITY ARE:
  - a) Plural Chord Relationships;
  - b) Diatonic Clusters.
- 6) All previous references to instrument registration, characteristics of instrument families and basic voicing principles are valid when dealing with six, seven and eight levels of density.
- 7) Because a minimum of six, seven or eight instruments out of the total instrumentation, up to a full ensemble are to be voiced on these chords, the main problem and area of confusion actually involves THE DIVISION OF THESE LARGER CHORD FORMS BETWEEN THE VARIOUS SECTIONS OR SELECTION OF INSTRUMENTS FROM THE VARIOUS SECTIONS.

- 8) Once the notes involved are determined, EACH SECTION OF THE BAND IS STILL VOICED IN ITS CHARACTERISTIC WAY. IT IS THE SUM OF THESE NORMAL VOICINGS THAT PRODUCES THE LARGER CHORD EFFECT.

### BASIC TECHNIQUE NO. 15

#### PLURAL CHORD RELATIONSHIPS

- 9) Although the ingredients of our objective are familiar techniques, the key to approaching the problem is based on the principle of PLURALITY. A review of the material on PLURALITY in Chapter Nine would be helpful in preparing you for this application of PLURALITY.
- 10) The smaller or interior chords that make up a large chord form are all familiar chord forms. By assigning a combination of these smaller chord forms to individual sections of the band, the sum of their vertical attack will be a six, seven or eight part chord or density. The specific voicing of a specific section on one of these interior chords uses THE SAME TECHNIQUES ALREADY COVERED IN THREE, FOUR AND FIVE PART DENSITIES (Chapters 14, 15 and 16).
- 11) Each of the CHORD FAMILIES I have defined in previous chapters becomes the SOURCE OF THESE INTERIOR CHORDS. Because we are dealing in six, seven and eight part chords, it is necessary to build each basic chord form to its 11th or 13th extension to produce enough notes to fill the structure.

Ex. #585

C ma 13(+11)



- 12) This example is of a C Maj13 (+11) chord, the seven note structure built from a C major triad. The interior chords that are within this larger structure would be:

TRIADS: Emin., G, Bmin., D, and Amin.

7THS: Emin7, Gmaj7, Bmin7 and Amin7

9THS: Emin9, Gmaj9, Bmin9 and Amin9.

(The Amin chord forms come from the fact that the C6th chord is a conventional alternate major chord that can be used in place of the Cmaj 7th.)

- 13) The application of the above theory is summarized in Example 586.

Ex. #586

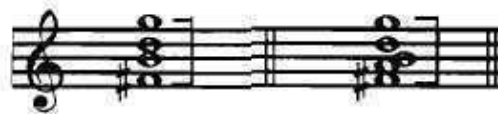
<b>Higher Pitched Instruments:</b>	Emi; Emi7 ;(Emi9); G; Gma7; G6; (Gma9); Bmi; (Bmi7); D; D7; Ami; Ami7;
<b>Lower Pitched Instruments:</b>	C; Cma7; C6; Cma9; C <sup>6</sup> 9; 4th Structure

- 14) The implication of the chord symbols in Example 586 is as follows:
- 15) All of the chord symbols above the line ARE ASSIGNED TO THOSE HIGHER PITCHED INSTRUMENTS FROM THE PARTICULAR INSTRUMENTATION YOU ARE DEALING WITH. This would typically apply to the trumpet section, 1st and 2nd Alto Sax (possibly, 1st tenor sax); the woodwind section.
- 16) ANY INVERSION OF THE CHORD SYMBOL (indicated above the line) IS POSSIBLE TO ENABLE YOU TO HARMONIZE THE GIVEN MELODY NOTE (i.e., if the note "E" is the melody note, I would have to utilize one of the chord symbols above the line THAT CONTAINS THE NOTE "E": Emi, Emi7, Emi9, G6, Ami or Ami7). If I chose to use Ami, I would have to invert the Ami triad so that the note "E" from the chord was on top.
- 17) The chord symbols above the line shown in parentheses are not normally used as much as the others, simply because the others are quite effective for most situations.
- 18) All of the chord symbols below the line ARE ASSIGNED TO THOSE LOWER PITCHED INSTRUMENTS FROM THE PARTICULAR INSTRUMENTATION YOU ARE DEALING WITH. These would typically apply to the low brass, sax section or tenors and baritone saxes.
- 19) The specific voicing used, once the interior chord has been assigned to a section or group of instruments, could be any of the normal characteristic section voicings (i.e., saxes: Block, "A", "B", Open 5 part, etc.; Trumpets: Triad with melody doubled an octave lower, Block, etc.)
- 20) The chord symbols indicated below the line for lower pitched instruments have the additional indication of "4th Structure." This means that any of the suggested voicings of chords in 4ths found in Tables 20, 22 or 24 could also be used as the understructure of the total voicing.
- 21) You will find corresponding breakdowns of the remaining chord families on the following pages. It is possible in actual application to memorize the gist of these relationships. They are, in fact, all the possible combinations of ADJACENT NOTES IN THE 13TH STRUCTURES OF EACH CHORD FAMILY. A visual or aural comprehension of the relationships will enable you to remember the relationships in the same way that you remember the chord spellings of the 13th structures.

### APPLYING PLURAL CHORD RELATIONSHIPS

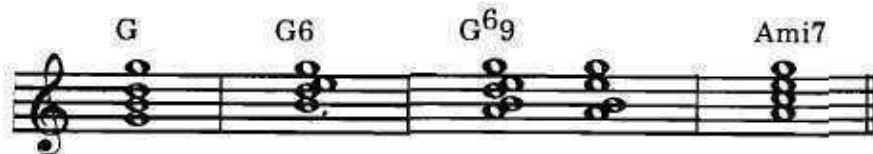
- 22) We will now take some possibilities from Example 586 and follow through the various steps, arriving at an ensemble voicing.
- 23) Let's assume we have a full band, and we wish an ensemble voicing. The specific problem is to voice a C Maj7th chord with a "G" melody note.
- 24) The first conclusion is that the C Maj7th chord symbol tells me that it is from the I Maj. Chord Family. Once I know this, I know the 13th structure will be a Major 13th (+11), the same as Example 585. With this selection of notes, I now need to select an INTERIOR CHORD for my Trumpet Section from the C Maj13th (+11) chord structure THAT INCLUDES THE MELODY NOTE "G". This would be Emi, Emi7 (Emi9), G, G6, Gma7, Gma9, G<sub>6</sub>9 or Ami7.
- 25) Of these interior chord possibilities, the Gma7 and Gma9 chords would not have a practical application. The reason for this is that if the melody note is "G," the position of the Gma7 or Gma9 would produce a MINOR 9TH interval between the melody note "G" and the Major 7th of the two chords. This is to be avoided because of the clash that is created. (Review Example 530 in Chapter 15.)

Ex. #587



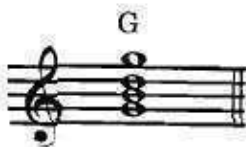
- 26) The remaining possibilities would be: (See Example 588.)

Ex. #588



- 27) My next decision is to determine the kind of trumpet section SOUND that I want. If the chart I am writing is in a particular style, that style would dictate my choice. A block trumpet voicing would be more conventional than a triad with the melody doubled an octave lower. Depending, then, on how conventional a style the chart is in, I will select the appropriate voicing. For this example, I'll assume I can write the style I want, and I will choose the triad (with doubled lead an octave lower). This means my selection would be the G major triad.

Ex. #589



- 28) To complete the brass section, I have a choice of any of the chords listed below the line in Example 586. As I have four trombones in the band, I need either a triad with a note doubled, a four part open or closed chord (the Cmaj7, C6 or a four part 4th structure), or a five part chord (Cma9 or Cma<sub>9</sub>) of which I will use the top four notes. (I can figure this way because I can catch the ROOT of the five part chord with the baritone in the sax section.) Now that I have both the trumpet and trombone voicing, I need to voice them together in such a way as to achieve a balanced blend between the two sections resulting in a full eight man brass section. At this point I will decide on the particular way to voice the trombones. The boxed voicing will be my choice.

Ex. #590

- 29) In this example, which is an isolated ensemble chord, I will approach the sax section voicing differently than I normally would. The difference is this: because the lead alto does not necessarily have to be playing the same melody lead as the first trumpet, the sax section (although part of the ensemble) will be playing a phrase that makes its own SENSE HORIZONTALLY. I would normally sketch out the lead alto line and, in the process, control the specific register in which I wish to keep the section.
- 30) For this isolated example, this HORIZONTAL CONSIDERATION will not be made. Instead, I will simply decide to voice the saxes with the lead alto on the melody note, an octave below the lead trumpet.



- 31) I can now choose from below the line in Example 586 either of the two five part chord forms, the Cma9th or C<sub>6</sub>9 as they both contain the melody note "G" which I need for the lead alto. As the C<sub>6</sub>9 contains an "A," I will pick this chord. (My final total chord will then be a six part density.)
- 32) The final ensemble voicing, showing all three sections plus the rhythm section would be:

## Ex. #591

The musical score for Example #591 is written for five staves. The top three staves are for the woodwinds: Trpts. (Trumpets), Trbs. (Trumpets/Bass), and Sxs. (Saxophones). The bottom two staves are for the rhythm section: Gtr. Pno. (Guitar/Piano) and Bass. The key signature is one flat (Bb). The time signature is 4/4. The woodwinds play a sustained chord of C69 (C major 6/9) in the first measure. The guitar/piano part plays a Cma7 (C major 7) chord in the first measure, indicated by the label 'Cma7' above the staff. The bass line plays a simple eighth-note pattern: G2, A2, B2, C3.

- 33) The final application process of these voicings is a summarization of many individual techniques involving orchestration, harmony and voicing considerations. Unless you have a solid foundation built from previous chapters, this approach will be very difficult and confusing. I URGE WHATEVER REVIEW YOU FEEL YOU NEED IN THESE CRITICAL AREAS BEFORE PRECEDING FURTHER.

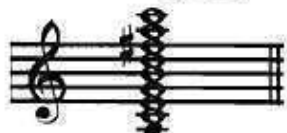


- 34) Now that the process of interpreting Example 591 has been explained and worked through, you will need the remaining PLURAL CHORD RELATIONSHIPS to be able to gain facility in all situations involving ensemble voicings in six, seven and eight part densities. Tables 27, 28 and 29 detail each chord family and their derivative PLURAL CHORD RELATIONSHIPS.
- 35) The example at the right-hand side of both tables illustrates some practical solutions to the problem of the ROOT IN THE MELODY.
- 36) Any chord symbols BELOW THE LINE (pertaining to the low pitched instruments) that are enclosed in parentheses relate to BASIC SUBSTITUTION CHORDS THAT CAN BE USED AS AN ALTERNATE TO THE BASIC CHORD NORMALLY ASSIGNED TO THE LOWER INSTRUMENTS OF AN ENSEMBLE. (See Tables 27, 28 and 29.)
- 37) EACH CHORD SYMBOL STATED IN THE FOLLOWING PLURAL CHORD RELATIONSHIPS CAN BE VOICED IN ANY OF THE APPROACHES COVERED IN THIS SECTION OF THE BOOK. It is this enormous flexibility that accounts for the variety of possible ensemble combinations and possibilities.

TABLE 27

MAJOR CHORD FAMILIES

Cma 13(+11)



I Maj. Chord Family

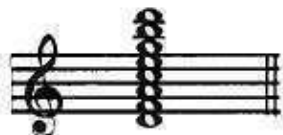
PANEL A

Root in Melody

Higher Pitched Instruments: Emi; Emi7; (Emi9); G; Gma7; G6; (Gma9); Bmi; (Bmi7); D; D7; Ami; Ami7

Lower Pitched Instruments: C; Cma7; C6; 4th Structures; C69; Cma9

Dmi 13



II mi7 Chord Family

PANEL B

Root in Melody

Higher Pitched Instruments: F; Fma7; Fma9; Ami; Ami7; Ami9; C; Cma7; Emi; (Emi7); G

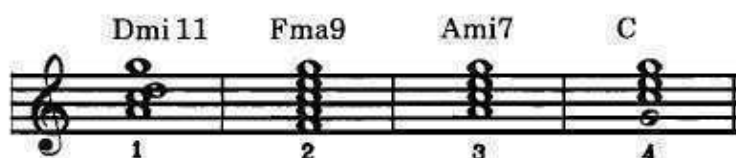
Lower Pitched Instruments: Dmi; Dmi7; Dmi9; 4th Structures; (Fma7; F69; F6)

G11



V 11 Chord Family

PANEL C

Root in Melody

Higher Pitched Instruments: Dmi; Dmi7; Dmi9; Dmi 11; F; Fma7; (Fma9); Ami; Ami7; C

Lower Pitched Instruments: G7(omit 3); G9(omit 3); Dmi7/G 4th Structures

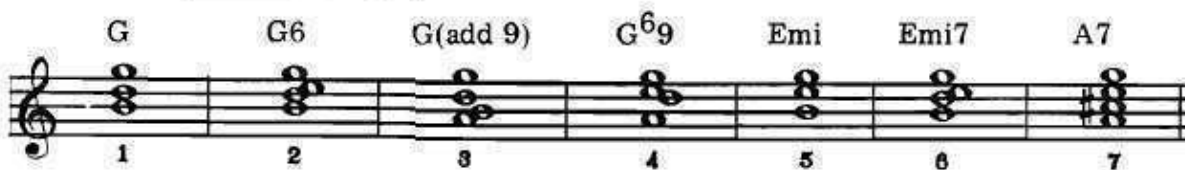
Root in Melody

G13(+11)



V 13 (+11) Chord Family

PANEL D



Higher Pitched Instruments: Bmi7(b5); Dmi; Dmi ma7; (Dmi ma9); F+; (Fma7+5); A; A7

Lower Pitched Instruments: G; G7; G9; (Bmi7b5); 4th Structures

TABLE 28

## MINOR CHORD FAMILIES

**Cmi ma 13**



**I Minor Chord Family**

**Root in Melody**


Cmi      F      Dmi7



PANEL E

**Higher Pitched Instruments:** Eb+; Ebma7 (+5); G,(G7); (G9); Bmi7(b5); Dmi; (Dmi7); F; Cmi  
**Lower Pitched Instruments:** Cmi; Cmi6; Cmi ma7; 4th Structures; (Ami7b5)

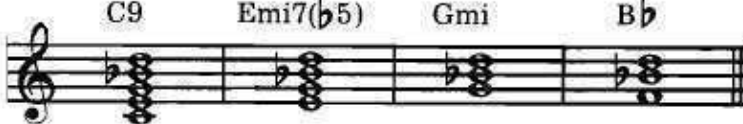
**Dmi 11 (+5) (b5)**



**II mi7 (b5) Chord Family**

**Root in Melody**

C9      Emi7(b5)      Gmi      Bb



PANEL F

**Higher Pitched Instruments:** Fmi, (Fmi ma7; Fmi ma9); (Ab+; Abma7+5); C; (C7, C9); Emi7(b5); Gmi; Bb  
**Lower Pitched Instruments:** D°; Dmi7(b5); Dmi 11(b5); 4th Structures

**G 13 (+11 and/or b9 or #9)**



**V 13(b9) Chord Family**

**Root in Melody**

Bb°7      Emi      G



PANEL G

**Higher Pitched Instruments:** B°7; Bma7(b3); Bb; Bbmi; Db;(Bb°7); Emi; E  
**Lower Pitched Instruments:** G; G7; G7(b9); G7(+9); 4th Structures

**PANEL H**

SIX PART DENSITY :	SEVEN PART DENSITY
<b>Higher Pitched Instruments:</b> Dbmi7; Emi7; Gmi7; Bbmi7	Db°7; E°7; G°7; Bb°7
<b>Lower Pitched Instruments:</b> G7; G7(b9); G7(+9) 4th Structures	G7;

(+11)  
V 13(b9) Chord Family

TABLE 29

## EIGHT PART DENSITY

## PANEL I

Higher Pitched Instruments: D $\flat$ mi6; Emi6; Gmi6; B $\flat$ mi6D $\flat$ <sup>o</sup>7; E<sup>o</sup>7; G<sup>o</sup>7; B $\flat$ <sup>o</sup>7Lower Pitched Instruments: G7; G7(b9); G7(+9)  
4th Structures

G7(b9)

(b13)  
(+11)  
G7(b9 and/or +9)

(b13)  
(+11)  
V+7(b9) Chord Family

## PANEL J

## Root in Melody

A $\flat$ mi ma7 B+ E $\flat$

Higher Pitched Instruments: D $\flat$ ; Fmi7(b5); E $\flat$ 

Lower Pitched Instruments: G+7; G7(omit 5); G7(b9)(omit 5); 4th Structures

D<sup>o</sup>7 (add D $\flat$ , E, G, B $\flat$ )

<sup>o</sup>7 Chord Family

## PANEL K

## Root in Melody

G B $\flat$  D $\flat$  E

## SIX PART DENSITY

Higher Pitched Instruments: D $\flat$ mi7; Emi7; Gmi7; B $\flat$ mi7

Lower Pitched Instruments:

D<sup>o</sup>7; D<sup>o</sup>7(add 9);

## SEVEN PART DENSITY

D $\flat$ mi6; Emi6; Gmi6; B $\flat$ mi6

4th Structures

<sup>o</sup>7 Chord Family con't.

## PANEL L

## EIGHT PART DENSITY

Higher Pitched Instruments: D $\flat$ <sup>o</sup>7; E<sup>o</sup>7; G<sup>o</sup>7; B $\flat$ <sup>o</sup>7Lower Pitched Instruments: D<sup>o</sup>7; D<sup>o</sup>7(add 9)  
4th Structures

## Passing Tones in Melody

B $\flat$  D $\flat$  F A $\flat$

- 38) To further illustrate the application of Tables 27, 28 and 29, study the following example:
- 39) Example 592 is a brass section passage in which the trumpets represent the plural chord relationship symbol ABOVE THE LINE, and the trombones the symbol BELOW THE LINE.

Ex. #592

## CIRCLELET

SC

Trpts

Trbs

$\frac{7}{2+}$   $\frac{6}{2+}$   $\frac{7}{2+}$

1 2 3 4 5

Bb13(+11) Ab13 F13 Ab13 Bb13(+11)

- 40) (The brass voicings in this example from CIRCLELET are from the V13(+11) family (Table 27, Panel D). Point 1 uses the Dom.7 shape for the trumpets, built from the 9th of the Bb13(+11). This is a transposition of the A7 in Panel D. The trombones use the 3rd, 5th and 7th of the basic chord, Bb7. This total voicing is an example of a typical ROOT IN THE MELODY voicing problem, as are all the voicings in this passage.
- 41) Point 2 is an Ab13 harmonization. The trumpets solve the root in melody problem using root in melody Example 3, a basic triad with an added 9th. The trombones are interpreting the Ab13 as a 4th structure, utilizing the 13th, 3rd and 7th. (See Table 20, Harmony Voicing 30 of the V7 Chord Family.) Of particular note is the fact that the 4th structure in the trombones adds a great deal of tension to the overall voicing. The trumpets sacrifice tension because of dealing with the problem of the root in the melody.
- 42) Point 3 is a similar Dom.13th harmonization, this time as an F13. However, again the root is in the melody and the trombones use the identical 4th structure (Example 30 in Table 20). The only variation is the trumpets use Example 4 in Panel D, implying a Major G9 chord.
- 43) Point 4 is the same as point 2; point 5 the same as point 1.

## SIX, SEVEN AND EIGHT PART

### DIATONIC CLUSTERS

- 44) DIATONIC CLUSTERS in six, seven and eight parts are based on the same factors as those outlined in Chapter 16. Those factors are:
- Restriction of the span (of different pitches) of the voicing to as thin as a seventh interval, to as deep as a 10th or octave and a half. (This does not affect the optional use of octave couplings of any of the notes involved.)
  - Clustering the pitches in combinations of 2nd and 3rd intervals.
- 45) This selection of pitches is determined by identifying the SCALE FROM WHICH THE BASIC CHORD IS DERIVED.
- 46) These specific scales and the notes that we use from the scales are all detailed in Chapter 16, Examples 576 through 581.
- 47) The following example illustrates the application of DIATONIC CLUSTERS:

Ex. #593

SC

#### SNEAKY PETE

The musical score for 'SNEAKY PETE' is presented in two systems. The top system is for Trpts. (in Harmons) and 2 Flts. Cl. (Flutes in Clusters). The bottom system is for Trpts. (in Cups) and Trpts. (in Cups). The score is divided into three measures, each labeled with a scale source: (Scale Source of Clusters) C Dorian Mode, D Dorian Mode, and C Dorian Mode. The clusters are indicated by vertical lines and dots above the notes, showing the specific pitches used in the diatonic clusters.

- 48) This excerpt from SNEAKY PETE applies the cluster to basically a brass orchestration, the woodwinds supplying octave couplings of the same notes used for the brass. Make special note of the division of the cluster in terms of the trumpets and trombones. These six part DIATONIC CLUSTERS utilize one doubling with the seven brass (measures two, four and six.)

- 49) The next example is an ensemble application from *BLUES TWO WAYS*. This is played at a very fast tempo and the effect is quite electrifying. The cluster adds an intensity to the ensemble that cannot be accomplished with other approaches.

Ex. #594

SC

**Very Fast**

Trpts. 1 2 3 4 5 6 7 8 9

Trbs. 1 2 3 4 5 6 7 8 9

Clar. 1 2 3 4 5 6 7 8 9

Alto Bs.Cl. 1 2 3 4 5 6 7 8 9

CHORDS 1, 3, 4, 6, 7 =  $F^9$  (Bb Major Scale – F Mixolydian Mode)  
 CHORDS 2, 5, 8 =  $E^{o7}$  (E 8 Note Diminished Scale)  
 CHORD 9 =  $Eb^{o7}$  (Eb 8 Note Diminished Scale)

- 50) Each of the nine scale sources employed in this example are detailed above. The level of density and span of orchestration of each voicing is defined above the example (i.e.,  $6 \frac{1}{2}$ ).

- 51) You should be aware of these conclusions regarding Example 594.

- The X in the trumpets between the second and third chords indicates crossing the 3rd and 4th trumpets to avoid repeated notes in the inner voices;
- The clarinet is doubling the lead trumpet;
- The bass clarinet is doubling the 3rd trombone;



- d) The alto sax is either playing the 9th of the dominant chords (at points 1, 4 and 7) or doubling lead an octave lower.

52) The next example is an extremely clustered effect.

Ex. #595

SC

The musical score for Ex. #595 is written for five parts: 4 Trpts. (Trumpets), 4 Trbs. (Trumpets/Bass), 2 Altos (Alto Saxophones), 2 Clars. (Clarinets), and Bs.Cl. (Bass Clarinet). The score spans 7 measures, with a double bar line at the end of measure 7. The key signature is B-flat major (two flats). The time signature changes throughout the piece: 5/2+ for measures 1-2, 4/2+ for measure 3, 6/2- for measure 4, and 5/2- for measures 5-7. The score includes various musical notations such as triplets, slurs, and dynamics. A crescendo (cresc.) is marked in measure 4, and fortissimo (ff) is marked in measure 5. The score is labeled with 'SC' in a box.

NOTE: Measures 5 and 6 of Supplementary Cassette recording.

- Point 1 = EbmiMaj11th — Eb Melodic Minor Scale  
 Point 2 = Ebmi9th — Db Major Scale or Eb Dorian Mode  
 Point 3 = F#mi7(b5) — A Melodic Minor Scale  
 Point 4 = F#<sup>o</sup>7 (add F) — F# 8 Note Diminished Scale  
 Point 5 = Bb7 (b13, +9, b9) — Cb Melodic Minor Scale (See Reference Point X, Table 26)  
 Points 6 and 7 = B<sup>o</sup>7 (add G, Db, Bb) — B 8 Note Diminished Scale



- 53) The following examples condense the orchestrated sketch of Example 595 into the basic clusters from which you can see the relationship between the notes selected for the cluster and the chord symbol/scale sources. The same "point" numbers refer to the seven clusters in Example 595.

Ex. #596

The image shows a musical score for Example 596, consisting of seven measures of music on a grand staff (treble and bass clefs). Each measure contains a cluster of notes. The clusters are numbered 1 through 7. Cluster 5 has a line pointing to it from the text 'The same "point" numbers refer to the seven clusters in Example 595.'

- 54) The cluster stacks in Example 596 should be related to the corresponding orchestrated versions in Example 595. Notice the distribution of pitches creating CONSONANT RELATIONSHIPS IN INDIVIDUAL INSTRUMENT FAMILIES.
- 55) Also notice the DENSITY – SPAN OF ORCHESTRATION relationship, as indicated above the voicings in Example 595.
- 56) Be very sure of the basic premises behind DIATONIC CLUSTERS. If you understand these essential premises you then have the information which, when used with the scale source tables and examples, will give you the specific sources of clusters plus the ability to apply them.

**ORCHESTRAL POSSIBILITIES APPLIED TO**  
**SIX, SEVEN AND EIGHT PART DENSITY**

- 57) Six, seven and eight part density can apply to the following orchestral situations:
- 58) **SMALL COMBO GROUPS OF SIX TO EIGHT HORNS** (some typical jazz and rock combo instrumentations would be):

**SIX HORNS** (with optional woodwind doublings on saxes)

<u>JAZZ</u>	<u>JAZZ OR ROCK</u>	<u>ROCK</u>
a) Trumpet	b) Trumpet	c) Three Trumpets
Trumpet (alto)	Trumpet	Three Trombones
Alto (Trumpet)	Tenor	
Tenor	Trombone	
Trombone	Trombone (Bass)	
Baritone	Baritone	

**SEVEN HORNS** (with optional woodwind doublings on saxes)

<u>JAZZ</u>	<u>JAZZ</u>	<u>ROCK</u>
d) Trumpet	e) Trumpet	f) Four Trumpets
Trumpet	Trumpet	Three Trombones
Alto	Alto	
Alto	Tenor	
Tenor	Trombone	
Trombone	Baritone	
Baritone	Tuba	

- 59) **EIGHT HORNS** (with optional woodwind doublings on saxes)

<u>JAZZ</u>	<u>JAZZ OR ROCK</u>	<u>ROCK</u>
g) Trumpet	h) Trumpet	i) Four Trumpets
Trumpet	Trumpet	Four Trombones
Alto	Alto	
Alto	Tenor	
Tenor	Trombone	
Trombone (Tenor Sax)	Trombone	
Trombone	Baritone	
Baritone	Tuba	
j) Three Trumpets		
Alto or Tenor		
Three Trombones		
Baritone		

- 60) Six, seven or eight part combinations from within a full band:
- a) Six, seven or eight man brass sections.
  - b) Trombone and sax (or woodwind) sections.
- 61) Ensemble voicings in six, seven or eight part density. (See Chapter 18.)
- a) All the implications of BASIC INSTRUMENT RANGES. Tables 15 and 16, as well as TYPICAL RANGES OF VARIOUS SECTIONS OF A BAND (see Chapter 14), apply here.

### SUMMARY

- 62) We have now discussed DIATONIC CLUSTERS from four to eight levels of density. Their use is characteristic of sophisticated jazz charts and modern composition, particularly in dramatic television and movie scoring. They can also be used effectively in more stylized jazz/rock situations. The effects that result from their use are:
- a) Very intense, tight harmonic sound;
  - b) "Distortion" of simpler harmonies;
  - c) A saturated harmonic treatment of MODAL AND EXTREMELY ALTERED CHORDAL PASSAGES.
- 63) Always sketch the desired cluster (based on the scale sources in Chapter 16), then orchestrate the voicing from the point of view described in Paragraphs 70-73 of Chapter 16, Page 272.



## SECTION IV – DENSITY

### Chapter 18: Ensemble, Section and Mixed Voicing Combinations

- 1) The result of our study of all levels of density applied to the characteristic harmonic considerations of today's jazz, rock and commercial music naturally leads us to the possible orchestral combinations.
- 2) Each concert selection of notes (from one to eight levels of density) can be orchestrated a number of ways. At this point we will summarize the sources of voicings and apply them to ENSEMBLE, SECTION AND MIXED VOICING POSSIBILITIES.
- 3) The key to this approach is to orchestrate a concert voicing in one of two ways:
  - a) **BY INSTRUMENT FAMILY** – This is normally referred to as **SECTION WRITING** (i.e., orchestrating four and five part density as five saxes, five trombones, five woodwinds)
  - b) **BY COMBINATION OF INSTRUMENT FAMILIES** – The most obvious orchestration here is treating, for example, five part density (or total of five voices with doublings) as five brass (3 trumpets, 2 trombones); six brass (3 trumpets, 3 trombones), seven, eight, nine or ten brass. In this way we **COMBINE** the trumpet and trombone families to function as a **BRASS SECTION**. In this combined sense, this is still **SECTION WRITING**.
- 4) Other combinations would be:
  - a) Woodwinds and trombones;
  - b) Woodwinds and trumpets;
  - c) Saxes and trombones.
- 5) **BY MIXED VOICINGS**. This is the least obvious and most flexible of all approaches. It is predicated on:
  - a) Orchestration of voices in a certain register by any instruments whose ranges are effective in that register, a natural assignment of instruments.
  - b) Deliberate breaking up and mixing of instruments from all sections.

### SECTION AND COMBINATION OF SECTION VOICINGS

- 6) The following Tables 30 and 31 detail each instrument family in relation to:
  - a) All the **SOURCES OF VOICINGS** covered in this book that most characteristically achieve an effective blend for that instrument family;
  - b) A breakdown of these **SOURCES OF VOICINGS** for various size instrument families (i.e., 2, 3, 4 and 5 trumpets, trombones, etc.).
- 7) Each characteristic voicing source for an instrument family can be related to the possible **PLURAL CHORD RELATIONSHIPS** covered in Tables 27, 28 and 29.
- 8) This means a chord symbol from a **PLURAL CHORD RELATIONSHIP** can be specifically voiced by an instrument family using any characteristic **VOICING SOURCE** listed in Tables 30 and 31.

TABLE 30

EACH INDIVIDUAL SECTION LISTED BELOW CAN BE COMPRISED OF THE FOLLOWING VOICINGS, DESCRIBED AND NUMBERED 1 THROUGH 56				
1 to 5 TRUMPETS:	1 Part	(1)	—	Unison and/or octaves.
	2 Part	(2)	—	Interval combinations, melodic couplings.
3, 4 or 5 TRUMPETS:	3 Part	(3)	—	Implied 4, 5, 6 and 7 part density.
		(4)	—	Triads (Opt. melody doubled 8vb).
		(5)	—	4ths (open or closed).
4 or 5 TRUMPETS:	4 Part	(6)	—	Implied 5, 6 and 7 part density.
		(7)	—	Block
		(8)	—	4ths (open).
5 TRUMPETS:	5 Part	(9)	—	Closed 5th clusters (diatonic clusters).
		(10)	—	Implied 6 and 7 part density.
		(11)	—	Block (adjacent 3rds with inversions).
		(12)	—	"A" Voicing
Optional Section Comprised of French Horns, Mellophones, etc. or Comb.				
1 to 4 HORNS:	1 Part	(13)	—	Unison and/or octaves.
	2 Part	(14)	—	Interval combinations, melodic couplings.
3 to 4 HORNS:	3 Part	(15)	—	Implied 4, 5, 6 and 7 part density.
		(16)	—	Triads (Opt. melody doubled 8vb).
		(17)	—	4ths (open or closed).
4 HORNS:	4 Part	(18)	—	Implied 5, 6 and 7 part density.
		(19)	—	Block (open or closed).
		(20)	—	4ths (open).
Flexible Section Comprised of Tenor and Bass Trombones and/or Tuba				
1 to 5 TROMBONES:	1 Part	(21)	—	Unison and/or octaves.
	2 Part	(22)	—	Interval combinations, melodic couplings.
3, 4 or 5 TROMBONES:	3 Part	(23)	—	Implied 4, 5, 6 and 7 part density.
		(24)	—	Triads (open or closed).
		(25)	—	4ths (open or closed).
4 or 5 TROMBONES:	4 Part	(26)	—	Implied 5, 6 and 7 part density.
		(27)	—	Block (open or closed).
		(28)	—	Open 4 part, "C" voicing.
5 TROMBONES:	5 Part	(29)	—	4ths (open or closed; diatonic clusters).
		(30)	—	Implied 6 and 7 part density
		(31)	—	Open 5 part voicings.
		(32)	—	4ths (open)
THE TOTAL LEVELS OF DENSITY, DISTRIBUTED THROUGHOUT THE ENTIRE BRASS SECTION LISTED ABOVE, BY MEANS OF PLURAL CHORD RELATIONSHIPS: ONE TO EIGHT LEVELS OF DENSITY				

TABLE 31

EACH INDIVIDUAL SECTION LISTED BELOW CAN BE COMPRISED OF THE FOLLOWING VOICINGS, DESCRIBED AND NUMBERED 1 THROUGH 56, IN COMBINATION WITH TABLE 30				
1 to 5 WOODWINDS:	1 Part	(33)	—	Unison and/or octaves
	2 Part	(34)	—	Interval combinations, melodic couplings.
3, 4 or 5 WOODWINDS:	3 Part	(35)	—	Implied 4, 5, 6 and 7 part density.
		(36)	—	Triads (open or closed)
		(37)	—	4ths (open or closed).
4 or 5 WOODWINDS:	4 Part	(38)	—	Implied 5, 6 and 7 part density.
		(39)	—	Block ("A", "B" and "C" voicings).
		(40)	—	4ths (open)
		(41)	—	Closed 5th clusters
5 WOODWINDS:	5 Part	(42)	—	Implied 6 and 7 part density (5 part open).
		(43)	—	Block (adjacent 3rds with inversions)
		(44)	—	4ths (open)
		(45)	—	<i>Diatonic clusters.</i>
1 to 5 SAXES:	1 Part	(46)	—	Unison and/or octaves.
	2 Part	(47)	—	Interval combinations, melodic couplings.
3, 4 or 5 SAXES:	3 Part	(48)	—	Implied 4, 5, 6 and 7 part density.
		(49)	—	Triads (open and closed)
		(50)	—	4ths (open or closed)
4 or 5 SAXES:	4 Part	(51)	—	Implied 5, 6 and 7 part density (4 part open).
		(52)	—	Block ("A", "B" and "C" voicings).
		(53)	—	4ths (open).
5 SAXES:	5 Part	(54)	—	Implied 6 and 7 part density (5 part open).
		(55)	—	4ths (open).
		(56)	—	<i>Diatonic clusters.</i>
THE TOTAL LEVELS OF DENSITY, DISTRIBUTED THROUGHOUT THE COMBINATION BRASS AND SAX SECTIONS LISTED ABOVE, BY MEANS OF PLURAL CHORD RELATIONSHIPS: ONE TO EIGHT LEVELS OF DENSITY.				
RHYTHM SECTION COMPRISED OF KEYBOARD, GUITAR, PERC. (Mallets) are capable of all possible voicing combinations.				
THE TOTAL LEVELS OF DENSITY, DISTRIBUTED THROUGHOUT THE COMBINATION BRASS, WOODWIND OR SAX AND RHYTHM SECTIONS, LISTED ABOVE, BY MEANS OF PLURAL CHORD RELATIONSHIPS: ONE TO EIGHT LEVELS OF DENSITY.				

(57) NOTE: All voicing techniques in Tables 30 and 31 can be applied against a PEDAL POINT EFFECT. (See pages 147 and 148.)

### MIXED VOICINGS

- 9) Orchestrating of MIXED VOICINGS frees you of the specific instrument family restrictions detailed in Tables 30 and 31.
- 10) In many ways, the MIXED VOICING APPROACH is the opposite of section writing. In a section voicing, you write for a certain instrument family in mind, and therefore have to fashion your voicing to conform to the number of instruments in the section and the TYPE OF VOICING that is characteristic to the instrument family.
- 11) In a MIXED VOICING approach you concern yourself with the precise voicing and sound you wish . . . then orchestrate from instruments in all sections that effectively sound in the register of your voicing.
- 12) Some common mixed combinations would be:
  - a) Trombones and baritone or bass clarinet.
  - b) Trumpets and altos.
  - c) Trumpets and woodwinds (flute, piccolo, clarinet, oboe).
  - d) Tenors and trombones.
  - e) Baritone (or bass clarinet) guitar and bass trombone (or tuba).
- 13) To further illustrate both section and mixed voicing approaches, the next series of examples, will range from different orchestral possibilities to various levels of density. A brief analyzation of each example will relate to the various techniques and approaches we have studied.

**TABLE 31**

EACH INDIVIDUAL SECTION LISTED BELOW CAN BE COMPRISED OF THE FOLLOWING VOICINGS, DESCRIBED AND NUMBERED 1 THROUGH 56, IN COMBINATION WITH TABLE 30				
1 to 5 WOODWINDS:	1 Part	(33)	—	Unison and/or octaves
	2 Part	(34)	—	Interval combinations, melodic couplings.
3, 4 or 5 WOODWINDS:	3 Part	(35)	—	Implied 4, 5, 6 and 7 part density.
		(36)	—	Triads (open or closed)
		(37)	—	4ths (open or closed).
4 or 5 WOODWINDS:	4 Part	(38)	—	Implied 5, 6 and 7 part density.
		(39)	—	Block ("A", "B" and "C" voicings).
		(40)	—	4ths (open)
		(41)	—	Closed 5th clusters
5 WOODWINDS:	5 Part	(42)	—	Implied 6 and 7 part density (5 part open).
		(43)	—	Block (adjacent 3rds with inversions)
		(44)	—	4ths (open)
		(45)	—	Diatonic clusters.
1 to 5 SAXES:	1 Part	(46)	—	Unison and/or octaves.
	2 Part	(47)	—	Interval combinations, melodic couplings.
3, 4 or 5 SAXES:	3 Part	(48)	—	Implied 4, 5, 6 and 7 part density.
		(49)	—	Triads (open and closed)
		(50)	—	4ths (open or closed)
4 or 5 SAXES:	4 Part	(51)	—	Implied 5, 6 and 7 part density (4 part open).
		(52)	—	Block ("A", "B" and "C" voicings).
		(53)	—	4ths (open).
5 SAXES:	5 Part	(54)	—	Implied 6 and 7 part density (5 part open).
		(55)	—	4ths (open).
		(56)	—	Diatonic clusters.
THE TOTAL LEVELS OF DENSITY, DISTRIBUTED THROUGHOUT THE COMBINATION BRASS AND SAX SECTIONS LISTED ABOVE, BY MEANS OF PLURAL CHORD RELATIONSHIPS: ONE TO EIGHT LEVELS OF DENSITY.				
RHYTHM SECTION COMPRISED OF KEYBOARD, GUITAR, PERC. (Mallets) are capable of all possible voicing combinations.				
THE TOTAL LEVELS OF DENSITY, DISTRIBUTED THROUGHOUT THE COMBINATION BRASS, WOODWIND OR SAX AND RHYTHM SECTIONS, LISTED ABOVE, BY MEANS OF PLURAL CHORD RELATIONSHIPS: ONE TO EIGHT LEVELS OF DENSITY.				

(57) NOTE: All voicing techniques in Tables 30 and 31 can be applied against a PEDAL POINT EFFECT. (See pages 147 and 148.)



### MIXED VOICINGS

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- 12) Some common mixed combinations would be:
  - a) Trombones and baritone or bass clarinet.
  - b) Trumpets and altos.
  - c) Trumpets and woodwinds (flute, piccolo, clarinet, oboe).
  - d) Tenors and trombones.
  - e) Baritone (or bass clarinet) guitar and bass trombone (or tuba).
- 13) To further illustrate both section and mixed voicing approaches, the next series of examples, will range from different orchestral possibilities to various levels of density. A brief analyzation of each example will relate to the various techniques and approaches we have studied.

## INSTRUMENT FAMILIES

## CAN'T BELIEVE IT BLUES

TEMPO: Q.N. = 96

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 13 to 16

Ex. #597

The voicings in  
this example are  
based on sources 35,  
51 and 54, Table 31.

Handwritten musical score for measures 13 and 14. The score is written for three staves: Alto/Alto/Tenor (top), Tenor/Bass (middle), and Bass (bottom). The key signature is B-flat major (two flats). Measure 13 is marked with a circled '13' and measure 14 with a circled '14'. Above measure 13, there is a circled '1' and a circled '2'. The notation includes various chords and melodic lines. Chords written below the staves are: G12, Eb7, Bb7, Eb7, Ab7, Eb9. The bass line is labeled 'BASS'.

Handwritten musical score for measures 15 and 16. The score continues from the previous system. Measure 15 is marked with a circled '15' and measure 16 with a circled '16'. Above measure 15, there is a circled '3'. The notation includes various chords and melodic lines. Chords written below the staves are: Eb9, Ab9, Eb9, Ab9, Eb9, Ab9, Ab9. The bass line continues with the same notation.

SC

- 14) This is a typical example of three, four and five part open sax writing. Except for reference points 1 and 3, the chords are voiced with the root in the baritone. Point 2 illustrates the problem of ROOT IN THE MELODY. In this instance, the root is also in the baritone and is a good example of mixing four and five part densities. Note the particular register this phrase is written in.

This very effective register provides a clear, full and brilliant SECTION SOUND.

### MAN IN MOTION

TEMPO: Q.N. = 126

Arranged and Composed by Sammy Nestico

STYLE: Rock

Measures E, F, G, H

#### Ex. #598

The musical score is handwritten and consists of five staves. The top staff is for 2 Alts (Alto Saxophones), the second staff is for 2 Tenors (Tenor Saxophones), and the third staff is for Baritone (Baritone Saxophone). The bottom two staves are for piano (piano) and bass (bass). The score is in 4/4 time and features a key signature of one flat (Bb). The tempo is marked as Q.N. = 126 and the style is Rock. The score includes dynamic markings such as *mp* (mezzo-piano) and *f* (forte). Chord symbols are written below the piano and bass staves, including *Ab*, *Abmaj7*, *Db sus4*, and *Db*. The score is divided into measures E, F, G, and H. A circled '1' is written above the first measure of the Tenors part, and a circled 'E' and 'F' are written above the piano part. The score is labeled 'Ex. #598' and 'MAN IN MOTION'.

The individual sax lines in this example are based on source 46 from Table 31.

Cont. on Next Page

The image shows a handwritten musical score for a saxophone section, consisting of five staves. The score is divided into two measures by a vertical line. The first measure contains a melodic line on the top staff, a counter-melody on the second staff, and a rhythmic line on the third staff. The second measure contains a melodic line on the top staff, a counter-melody on the second staff, and a rhythmic line on the third staff. Chord markings 'G' and 'H' are written below the second and third staves respectively. The notes 'Db mi' and 'Ab sus 4 Ab' are written below the third and fourth staves respectively.

SC

- 15) Sammy Nestico has utilized the sax section in a very interesting way. By splitting the five saxes into three melodic and rhythmic ideas he has accomplished a statement of a melody (played by the two altos); a countermelody (played by the two tenors) that defines the harmonic line by basing it on the 3rd or 7th of the chords (see point 1); and a pedal root effect (played by the baritone). The lower placement of the saxes achieves a blending effect, even though the three different rhythmic ideas are used.

TEMPO: Q.N. = 100

STYLE: Boogaloo

Arranged by Dick Grove

Measures F5, F6

## Ex. #599

The voicing in this example is based on sources 46 and 47, Table 31.

ALTO

ALTO

2 TENORS/BARI

E $\flat$  A $\flat$  E $\flat$ 7 A $\flat$

GTR

F5-F6

BASS

SC

- 16) This sax soli is based on diatonic melodic couplings, a third below the melody. The second alto is playing the coupling with the melody receiving the important role, doubling the lead alto with both tenors and baritones. This phrase is in an effective range, matching the dynamic level.

## SOUNDSCAPE

TEMPO: Q.N. = 160

STYLE: Latin Jazz

Arranged and Composed by Dick Grove

Measures 37 to 40

The voicing in this example  
is based on source 29, Table 30

Ex. #600

Handwritten musical score for measures 37 to 40. The score is written on three staves. The top staff is labeled '4 TRBS' and shows four measures of music with a 'mf' dynamic marking. The middle staff is labeled 'Dmi II' and shows a series of slurs. The bottom staff is labeled 'BASS/PNO' and shows a series of notes. A box labeled 'SC' is located to the right of the bottom staff. A bracket above the middle staff is labeled 'Gtr - Comp LATIN/JAZZ'.

- 17) This trombone vamp from the composition SOUNDSCAPE is an effective usage of 4 part chords in 4ths, the trombones executing a very biting attack. These particular 4th voicings were presented in Table 22 (Chapter 15), examples (p) and (r). They produce a modern stylistic sound and complement the sophisticated minor idiom of this chart or of any jazz/modal composition. This example also illustrates the mixing of differently constructed chords in 4ths. Any of the forms in Table 22 can therefore mix quite naturally.

## SOUNDSCAPE

TEMPO: Q.N. = 160

STYLE: Latin Jazz

Arranged and Composed by Dick Grove

Measures 107 to 112

Ex. #601

the voicings in this  
example are based on  
sources 1, 21, 51, 52  
and 53, Tables 30  
and 31.

Handwritten musical score for measures 107 and 108. The score is written in 4/4 time and includes parts for Brass, Woodwinds, and Piano.

**Brass Section:**

- Trumpets (TRUMPETS):** Measure 107 has a whole note chord of A2 and B2. Measure 108 has a whole note chord of A2 and B2.
- Trombones (TROMBONES):** Measure 107 has a whole note chord of A2 and B2. Measure 108 has a whole note chord of A2 and B2.

**Woodwind Section:**

- SAXES:** Measure 107 has a whole note chord of A2 and B2. Measure 108 has a whole note chord of A2 and B2.

**Piano Section:**

- CHORDS:** Measure 107 has a whole note chord of Dm7. Measure 108 has a whole note chord of Gm9.

Continued on Next Page

Handwritten musical score for measures 109-111. The score is written on a grand staff with five systems of staves. Measures 109 and 110 are marked with circled numbers above the first staff. Measure 111 is also marked with a circled number. The notation includes various musical symbols such as notes, rests, and dynamic markings like 'f' and 'a2'. A 'TENOR Sx' label is present in measure 111. The bottom staff shows chord symbols: Dmi7, Gmi9, and Dmi7.

SC

- 18) This excerpt from *SOUNDSCAPE* is based on a contrapuntal treatment of the first two measure trumpet theme. The band has been divided into four smaller bands; three of them devoted to the fugal treatment of the theme, with the remaining four saxes providing harmonized accompaniment. Reference point 1 in the saxes shows the use of example (c) from Table 22, page 248.



## MOON ROCKS

TEMPO: Q.N. = 138

Arranged and Composed by Dick Grove

STYLE: Baroque

Measures 1, 2, 3, 4

Ex. #602

Handwritten musical score for measures 1 and 2 of 'Moon Rocks'. The score is in 4/4 time and features five staves. The instruments and parts are labeled as follows:

- FLUTE 1**: Staff 1, measures 1 and 2.
- FLUTE 2**: Staff 2, measures 1 and 2, with circled numbers 1 and 2 above the notes.
- CLAR. 3-4**: Staff 3, measures 1 and 2, with a circled number 1 above the notes.
- B.C. CLAR 5**: Staff 4, measures 1 and 2, with a circled number 1 above the notes.
- BELL OF CYM**: Staff 5, measures 1 and 2, with a circled number 1 above the notes.

The score includes dynamic markings such as *mp* and *p*, and articulation marks like accents and slurs.

The voicings in this example are based on source 36, Table 31.

Continuation of the musical score for measures 3 and 4 of 'Moon Rocks'. The score is in 4/4 time and features five staves. The instruments and parts are labeled as follows:

- FLUTE 1**: Staff 1, measures 3 and 4.
- FLUTE 2**: Staff 2, measures 3 and 4, with circled numbers 3 and 4 above the notes.
- CLAR. 3-4**: Staff 3, measures 3 and 4, with a circled number 3 above the notes.
- B.C. CLAR 5**: Staff 4, measures 3 and 4, with a circled number 3 above the notes.
- BELL OF CYM**: Staff 5, measures 3 and 4, with a circled number 3 above the notes.

The score includes dynamic markings such as *mp* and *p*, and articulation marks like accents and slurs.

SC

- 19) The woodwind quintet featured in this introduction illustrates a practical application of OPEN TRIADIC VOICINGS. The lead flute entrance in measure 2 functions as a FREE RHYTHMIC LEAD over the triad accompaniment. The opening rhythmic statement used in each measure of this example is used as a motif throughout the complete chart. Variations by sequence and inversion are used during the chart as a development of this basic thematic idea. (See Chapter 6.)

## SOUNDSCAPE

TEMPO: Q.N. = 108

Arranged and Composed by Dick Grove

STYLE: Bossa Nova

Measures 160, 161, 162

Ex. #603

FLUTE  
FLUTE  
CLAR.  
CLAR.

FLUGELHORN Solo (160)

TRIPS IN HARMONIES

(161) (162)

FL. HORN

TRIPS.

Dbmaj9

Gb(+11) Gb Gm7(b5)

GRL/PNO

BASS

SC

The woodwind voicings in this example (measures 161, 2) are based on sources 38 and 39, Table 31.

- 20) Measure 161 of this example uses a closed, BLOCK VOICING. The uniqueness of sound comes from the implied 7 part chords. The 13/5, 11/3 and 9/1 substitutions effectively imply the 7 part harmony while the BLOCK voicing supplies the close support for these high tension notes (see Tables 18 and 21). This woodwind passage functions as a melodic fill to the flugelhorn solo at point 1 . . . sustaining while the flugelhorn moves rhythmically. The French horn lead over the trombone section provides the HARMONIC PAD, setting up the foundation needed to make the implied harmony in the woodwinds more effective.

## MAN IN MOTION

TEMPO: Q.N. = 126

Arranged and Composed by Sammy Nestico

STYLE: Rock

Measures 21, 22, 23

The trombone voicings in this example are based on sources 13, 23 and 24, Table 30; 57, Table 31.

SC

Ex. #604

Handwritten musical score for measures 21, 22, and 23 of "MAN IN MOTION". The score is written for a 4/4 rock tempo (Q.N. = 126) and features parts for TENDERS, BARI, TRPTS, 4 TRBNS, PNO/GTR 1, GTR 2, and BASS.

Measure 21: The 4 TRBNS part has a block voicing with a  $b7/5$ , root doubled. The GTR 2 part has a sequence of chords:  $A^b$ ,  $A^b7$ ,  $D^b$ ,  $D^bmi$ , and  $A^b$ .

Measure 22: The 4 TRBNS part has a block voicing with a  $6/1$  against an  $A^b$  pedal. The GTR 2 part has a sequence of chords:  $A^b$ ,  $A^b7$ ,  $D^b$ ,  $D^bmi$ , and  $A^b$ .

Measure 23: The TRPTS part has a melodic line with a 2nd interval. The GTR 2 part has a sequence of chords:  $A^b$ ,  $A^b7$ ,  $D^b$ ,  $D^bmi$ , and  $A^b$ .

- 21) The trombones in this situation achieve a very full, "organ" like sound, due to the register, open voicing and 3 part density. It is typical in a rock chart of the type Sammy has written to reinforce the characteristic rock harmonic scheme by staying with 3 part density in a four man section by doubling one note in each chord. By implying 4 part density (Table 18) more interest is present.
- 22) Notice the handling of the 3rd and 4th trombone relative to the always present problem of register when voicing low pitched instruments. (Review Chapter 14, Example 511, Page 234.)
- 23) The trumpets in measure 23 are typical consonant interval combinations defining the basic chords (Ab-Db).

### COMBINED INSTRUMENT FAMILIES

- 24) This next series of examples combines the trumpet and trombone sections of the band, ranging from 2 to 7 part voicings. Relate the variations of effects created by the use of different levels of density to the distribution of the voicings between the two sections. This last statement summarizes applications of PLURAL CHORD RELATIONSHIPS with Tables 30 and 31.

### CHICKEN LITTLE

TEMPO: Q.N. = 80-100

STYLE: Slow Blues

Arranged and Composed by Dick Grove

Measures 57, 58, 59

Ex. #605

The voicings in this example are based on sources 1, 2, 21 and 22, Table 30.

SC

- 25) This passage accomplishes several effects. The registers involved (4 octave span of orchestration) create excitement and a climactic entrance, gradually tapering down as the melody descends and the countermelody ascends. The contrary motion adds interest. This directional contrast first makes the trumpet line important, but as the trumpets continue descending, the ascending trombone line becomes more apparent and gains the primary importance.
- 26) The sparse two part voicing adds to the melodic strength while the interval relationship between the two lines provides interest. Each player has more opportunity to personally interpret the melodic inflections and nuances because all involved are playing a strong melodic idea as opposed to many of the horns playing inner harmony notes in a normal fully harmonized situation.

## MOON ROCKS

TEMPO: Q.N. = 138

Arranged and Composed by Dick Grove

STYLE: Jazz/Rock

Measures 35, 36, 37, 38

Ex. #606

Handwritten musical score for "Moon Rocks" measures 35-38. The score is written on five staves. The top staff is for Trumpets (Cup and Harmon), the second for Trombones, the third for Guitar/Piano, the fourth for Bass, and the fifth for Drums. Measures 35-38 are marked with circled numbers. Chords Gmi7, Eb, and Fmi7 are indicated. The score shows a descending trumpet line and an ascending trombone line, creating contrary motion.

The voicings in this example are based on sources 1, 21 and 22. Table 30.

SC

- 27) This example of a melodic coupling in the trombones is typical of many rock treatments of a melody. The choice of the consonant 6th interval is harmonically definitive as well as characteristic of the style.
- 28) The melody itself is based on the original thematic material in Example 602 of this chapter. By referring to Example 602, you will notice point 1 (in this example) is an inversion of the original, while point 2 is a sequence. All instances (points 1, 2 and 3) employ the same rhythmic motif as used in Example 602.
- 29) The use of two different kinds of mutes for the trumpets provides interest and, in a relatively uncluttered situation such as this, are easily heard due, primarily, to the cutting sound of the Harmon mute.

## MISTER BLUE

TEMPO: Dotted Q.N. = 68

Arranged and Composed by Dick Grove

STYLE: Funky 6/8, Mixolydian Mode

Measures 81 through 86

Ex. #607

Handwritten musical score for "MISTER BLUE" measures 81 through 86. The score includes staves for Trumpets (TRPTS), Trombones (TRBS), Alto Saxophone (ALTO), Tenors/Baritone (TENORS/BARI), and Rhythm Section (RHY. - TENOR SX SOLO). Measures 81 and 82 show the trumpet and trombone parts with a 6th interval coupling. Measure 83 shows the alto saxophone and tenors/baritone parts. The rhythm section part is a continuous eighth-note pattern. Chords F7 and Bb9 are indicated below the tenors/baritone staff.

The brass voicings in this example are based on sources 2, 3, 4 and 22, Table 30.

SC

Cont. on Next Page

Handwritten musical score for a jazz arrangement. The score is written on a grand staff with five systems of staves. The first system shows a tenor (or flute) solo with a circled measure number 84. The second system shows a tenor (or flute) solo with a circled measure number 85. The third system shows a tenor (or flute) solo with a circled measure number 86. The fourth system shows a tenor (or flute) solo with a circled measure number 87. The fifth system shows a tenor (or flute) solo with a circled measure number 88. The bottom staff shows a bass line with a circled measure number 84. The bottom staff shows a bass line with a circled measure number 85. The bottom staff shows a bass line with a circled measure number 86. The bottom staff shows a bass line with a circled measure number 87. The bottom staff shows a bass line with a circled measure number 88. The bottom staff shows a bass line with a circled measure number 89. The bottom staff shows a bass line with a circled measure number 90. The bottom staff shows a bass line with a circled measure number 91. The bottom staff shows a bass line with a circled measure number 92. The bottom staff shows a bass line with a circled measure number 93. The bottom staff shows a bass line with a circled measure number 94. The bottom staff shows a bass line with a circled measure number 95. The bottom staff shows a bass line with a circled measure number 96. The bottom staff shows a bass line with a circled measure number 97. The bottom staff shows a bass line with a circled measure number 98. The bottom staff shows a bass line with a circled measure number 99. The bottom staff shows a bass line with a circled measure number 100.

- 30) These background figures behind the tenor (or flute) solo are part of an alternating series of figures. The repetition and sequence of these voicings and rhythmic patterns add a continuity behind the solo that gradually builds to a peak, plus creating a mood characteristic of the style.
- 31) Only five brass (3 trumpets, 2 trombones) are used, mainly because of the lower register and because only three and two part harmony is required. A higher register would require more brass to provide balance and support to the voicing.
- 32) Specific articulation markings help to "dress up" the relatively simple voicings and again are characteristic of the style.



## CHICKEN LITTLE

TEMPO: Q.N. = 200-240

Arranged and Composed by Dick Grove

STYLE: Jazz/Modal

Measures 41, 42, 43

Ex. #608

4 TRPTS.

mf

4 TROMBS.

mf

2 ALTO'S / 2 TENORS

(GRAB! TAG!)

(41) (42) (43)

D $\flat$ mi $\flat$ 9 / G $\flat$ mi $\flat$ 7 Am $\flat$ 7 G $\flat$ mi $\flat$ 9 / Am $\flat$ 7 G $\flat$ mi $\flat$ 7

(BASS)

The brass voicings in this example are based on sources 6, 7, 24 and 27, Table 30.

SC



- 33) These brass voicings are normal applications of PLURAL CHORD RELATIONSHIPS as defined in Tables 27, 28, 29, 30 and 31. Both sections are individually voiced BLOCK, creating levels of from four to six part density. Many of the doublings that occur in the trombones are used either to maintain a root on the lowest voice and/or better voiceleading. If the lead was a 5th higher, triads WITH THE MELODY DOUBLED IN 4TH TRUMPET AN OCTAVE LOWER WOULD PROVIDE A BETTER OVERALL BALANCE THROUGHOUT THE SPAN OF ORCHESTRATION.
- 34) The passing chords used are based on the diatonic passing chord approach (see Chapter 8). This helps bolster the general modal construction of the composition as well as staying consistent with the chord "sound" of the chart.
- 35) The rhythmic patterns and articulations are typical jazz syncopated phrases.

TEMPO: Q.N. = 100

Arranged by Dick Grove

STYLE: Boogaloo

Ex. #609

The brass voicings in this example are based on sources 4 and 24, Table 30.

SC

- 36) This simple brass usage of triads has been made more interesting by the addition of the pedal Eb in the 4th trombone. (Review Chapter 9.) This pedal is based on the dominant of the Ab key area. The factor brought out here is the application of a pedal tone that is used rhythmically WITH the brass section, rather than rhythmically AGAINST the section.
- 37) A pedal, as in this example, is also quite suitable to a rock style, the effect harmonically is that of a suspension, Db/Eb.
- 38) Notice specific articulation markings. These insure the section phrasing together and are characteristic brass rock figures.

## CHICKEN LITTLE

TEMPO: Q.N. = 200-240

Arranged and Composed by Dick Grove

STYLE: Jazz/Modal

Measures 143 to 148

Ex. #610

The musical score for measures 143-148 of 'Chicken Little' is presented in a system of five staves. The top two staves are for the brass section, with the first staff labeled 'TRPTS.' and the second 'TRBBS.'. The third staff is for the 'ALTOs' and the fourth for 'TENORS / BAR.'. The bottom staff is a single line. The key signature has one flat (Bb) and the time signature is 4/4. The score includes various musical notations such as triads, articulation marks (accents), and dynamic markings (f). Measure numbers 143, 144, 145, and 146 are circled above the Alto and Tenor/Baritone staves. The Alto part features a melodic line with eighth and sixteenth notes, while the Tenor/Baritone part provides a harmonic accompaniment with similar rhythmic patterns.

Cont. on Next Page

The voicings in this example are based on sources 4, 7, 9, 24, 27 and 29, Table 30.

SC

- 39) The brass background figures in this example provide more than the obvious rhythmic attack. This is an application of passing chords from bass lines (Chapter 8) in which a directional 4th trombone and bass/descending line is moving against a common or repeated tone in the 1st trumpet (see Paragraph 54c, Chapter 8). Landing points in measure 143 and 146 relate to a basic Dm harmonization. The passing chords in measures 144 and 145 are diatonic (see Table 11) and are voiced tightly, clusters being used in measures 143, 144 and 145. This stylized approach in the brass voicings and directional bass line play against the octave sax melody very effectively. The simple brass rhythmic attack builds, yet leaves plenty of room for the more rhythmical sax figures. Notice how the span or orchestration gradually opens up, helping to build a climactic result in measure 148.

## SOUNDSCAPE

TEMPO: Q.N. = 160

Arranged and Composed by Dick Grove

STYLE: Latin/Jazz

Measures 23-25

Ex. #611

Handwritten musical score for measures 23-25. The score is written on five staves. The first staff is labeled 'TRAPS' and contains measures 23, 24, and 25. The second staff is labeled 'TRSS' and contains measures 23, 24, and 25. The third staff is labeled '2 FLUTES' and contains measures 23, 24, and 25. The fourth staff is labeled 'CLAR.' and contains measures 23, 24, and 25. The fifth staff is labeled 'BASS' and contains measures 23, 24, and 25. The score includes various musical notations such as notes, rests, and dynamic markings. A bracket labeled '+ DRUMS' is placed under the bass staff for measures 24 and 25.

The brass voicings in this example are based on sources 4, 5 and 25, Table 30. The overall effect is that of diatonic clusters. The woodwind source is 34, Table 31.

SC

- 40) **SOUNDSCAPE** begins in an impressionistic mood. The brass diatonic clusters help a great deal in conveying this feeling. This brings out one of the most important by-products of diatonic clusters, namely that although they produce a high level of sophistication, they always conform to and derive from conventional chord structures and key feelings.
- 41) This example only utilizes six brass. The full middle register of this excerpt negates the need for a wider span of brass orchestration.
- 42) The woodwinds add their dimension primarily from the octave coupling of the melody, and secondarily from the coupling a 6th above the trumpet lead.

## MOON ROCKS

TEMPO: Q.N. = 138

Arranged and Composed by Dick Grove

STYLE: Jazz/Rock

Measures 20 to 29

Ex. # 612

Handwritten musical score for "MOON ROCKS" (Measures 20 to 29). The score is in 4/4 time and features three staves:

- Top Staff (Trumpets):** Labeled "TRUMPETS". It contains diatonic clusters and melodic lines.
- Middle Staff (Brass):** Labeled "BRASS". It contains diatonic clusters and melodic lines.
- Bottom Staff (Alto Saxophone):** Labeled "ALTO". It contains a melodic line. Handwritten notes include "TENORS 8VB, BARI TACIT" and "BASS (GTR./PNO TACIT)".

The measures are numbered 20, 21, and 22. The music consists of diatonic clusters and melodic lines.

Cont. on Next Page

The brass voicings in this example are based on sources 10 and 24, Table 30

SC

- 43) These five and six part brass voicings produce a very saturated effect. They are a case in point, however, that saturation DOES NOT ALWAYS MEAN A DEEP SPAN OF ORCHESTRATION. In a sense, the use of this register and span of orchestration is a CONTROLLED SATURATION. CONTROLLED, because it can be executed at many dynamic levels.
- 44) Notice the dove-tailing of the 1st and 2nd trombones into the lower trumpets. This enables me to assign a better individual section voicing, as opposed to simply working downwards and always assigning the next adjacent tone to the next lowest instrument.

## SNEAKY PETE

TEMPO: Q.N. = 160

Arranged and Composed by Dick Grove

STYLE: Jazz/Modal

Measures 117 to 120

Ex. # 613

Handwritten musical score for measures 117 to 120 of the piece "Sneaky Pete". The score is written in 4/4 time and includes parts for TRPES, TRBS, ALTO, TENORS/BARI, Gm13, and BASS. The key signature is one flat (Bb). The tempo is marked as Q.N. = 160 and the style is Jazz/Modal. The score shows four measures, with measure numbers 117, 118, 119, and 120 circled. The TRPES part features eighth notes and quarter notes. The TRBS part features chords and eighth notes. The ALTO part features a melodic line with eighth notes. The TENORS/BARI part features a melodic line with eighth notes. The Gm13 part features a bass line with eighth notes. The BASS part features a bass line with eighth notes.

The brass voicings in this example are based on sources 4, 7, 10 and 27, Table 30.

SC

- 45) These brass background figures illustrate six and seven part densities. In a "riff" type of figure such as this, the short attacks and fairly static melody allows the sax theme to shine through. However, the excitement and the intensity of the brass never detracts. In a modal, non-modulatory harmonic situation such as this, all these characteristics are possible. This, however, would be more difficult in standard modulatory compositions.
- 46) The BLOCK voicing in each section adds an overall tight sound. This, plus a span of two octaves, makes the figures easily playable and enables the section to swing.

#### MORE COMBINED INSTRUMENT FAMILIES

- 47) In the same way that the last series of examples combined the trumpet and trombone sections, this series will combine the trumpet, trombone and saxophone families.
- 48) All of the following examples in this series should, therefore, be analyzed from two standpoints: (1) How each individual section is voiced and; (2) The total overall relationship of the voicings in each section to each other and to the ensemble.
- 49) Now we are in the area of correlating the plural chord relationships in Chapter 17, Tables 27, 28 and 29 to individual section voicing approaches in Tables 30 and 31.



TEMPO: Q.N. = 100

Arranged by Dick Grove

STYLE: Boogaloo

Measures F3, F4

Ex. # 614

Handwritten musical score for a Boogaloo arrangement, measures F3 and F4. The score includes staves for Trumpets (TAP1s, TABS), Alto Sax (ALTOs), Tenor Sax (TENORS), Guitar/Piano (GTR/PNO), and Bass (BASS). The key signature is B-flat major (two flats). The tempo is marked 'Q.N. = 100' and the style is 'Boogaloo'. The arrangement features a complex rhythmic pattern with many beamed eighth and sixteenth notes. Handwritten annotations include 'f' for forte, 'F3' and 'F4' in circles, and 'SOL' in parentheses. The guitar/piano part shows chords: Ab69, Bbmi7/Ab, and Ab69. The bass part has a handwritten 'BASS' label with an arrow pointing to the staff.

The voicings in this example are based on sources 1 and 21, Table 30; source 46, Table 31.

SC

- 50) This is an example of a very simple and effective ensemble approach utilizing unison sections and instrument families from within the band.
- 51) The impact of this approach emphasizes melody and rhythm and is usually a solution to a particular phrase whose melody covers a wide range of notes (see Example 614; melodic range, Eb up to Ab), and whose rhythmic patterns contain rapid attacks (16th notes, double-time feeling).
- 52) In many cases, it would be an out and out misjudgment to treat such a passage in even a three or four part density.
- 53) The decision as to HOW the instrument families are to be divided is dependent upon their respective ranges (see basic instrument ranges 1 through 5, Tables 15 and 16, Chapter 12).

TEMPO: Q.N. = 138

## MOON ROCKS

STYLE: Jazz

Arranged and Composed by Dick Grove

Ex. # 615

Measures 114, 115, 116

Handwritten musical score for measures 114, 115, and 116 of "Moon Rocks". The score is in 4/4 time and features five staves: Traps, Trbs, Altos/TN's, Bar1, and Gtr/PNO. The Traps and Trbs staves show complex rhythmic patterns with many beamed notes. The Altos/TN's and Bar1 staves show a more melodic line with some rests. The Gtr/PNO staff shows a bass line with a key signature change to F minor (Fm:1/bb) indicated by a slash and a flat. The Bass staff is empty. The measures are numbered 114, 115, and 116 at the bottom of the staves.

These voicings are based on  
sources 2 and 14 of Table 30;  
sources 46 and 47, Table 31.

SC

- 54) This use of the 4th interval or melodic coupling produces a two part density effect. This effect is almost as intense as unison but provides a hint of harmony bridging the extremes of unison and full harmony.
- 55) In Example 615, the brass sections are DIVISI, two horns on each part in contrast to Example 614. The altos and tenor saxes are each in unison with the baritone sax doubling the altos an octave lower.
- 56) On your own, relate this melodic motif to the previous thematic materials illustrated in Examples 602 and 606 to the development possibilities discussed in Chapter 6, Paragraph 2.

## MAN IN MOTION

TEMPO: Q.N. = 126

Arranged and Composed by Sammy Nestico

STYLE: Rock

Measures 45, 46

Ex. #616

Handwritten musical score for measures 45 and 46 of 'MAN IN MOTION'. The score is for five parts: TRPIS, TRBS, ALTOS, IN. 2 / BARI, and a Bass line. The key signature has two flats (Bb, Eb) and the time signature is 4/4. The music features a melodic motif in the upper parts with a 4th interval coupling. The lower parts provide harmonic support with chords and a bass line. Measure numbers 45 and 46 are circled. Dynamics include 'f' (forte).

Chords indicated below the staff:

- Ab f
- Db
- Fmi7
- Bbmi7
- Bbmi7/B

SC

These voicings are based on sources 4, 7, 23, 24 of Table 30; sources 49, 51, Table 31.

- 57) This ensemble voicing utilizes three part density and a section writing approach for the most part. The effect achieved is typical of a ROCK ENSEMBLE sound. The degree of harmonic sophistication is usually less in a rock situation. The last three chords in measure 46 are four part. However, the overall effect remains relatively unsaturated.
- 58) Study how Sammy has doubled the triads throughout the sections, resulting in a fairly low, round gutty ensemble sound.
- 59) Notice also the relationship between the lead alto part and the first trumpet lead. This independent handling by the saxes in relation to the brass is quite typical and allows the arranger to CONTRDL the sax sound. This would be particularly critical if fewer instruments were involved and the saxes were needed to cover notes the brass had omitted.
- 60) If the brass were written an octave higher, it would fall to the saxes to provide the fullness in the lower register.

## CHICKEN LITTLE

TEMPO: Q.N. = 80-100

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 45, 46, 47

Ex. #617

Handwritten musical score for "CHICKEN LITTLE" measures 45, 46, and 47. The score is written for a jazz ensemble with parts for TRUMPETS, TRBS, ALTO 1-2 / TEN 1, TEN 2 / BARI, and BASS. The key signature has two flats (Bb and Eb). Measure 45 has a key signature change to one flat (Bb). Measure 46 has a key signature change to no flats (C major). Measure 47 has a key signature change to one flat (Bb). The bass line is written in a simplified style with whole and half notes. Chords are indicated below the bass line: Gmi7, Ebma9, Dmi7, Cmi7, Cmi7, Dmi7, Eb69.

The voicings in this example are based on sources 4, 6, 24, 27, Table 30; 52, 54, Table 31.

SC

- 61) This ensemble phrase is a very effective example of a full, modern ensemble sound. Although the DENSITY FACTOR does not exceed five parts, the natural strength of these density levels still produces the big ensemble effect.
- 62) You should be aware of a number of conclusions:
- The span of orchestration does not exceed two and a half octaves enabling an ensemble to execute a moving melody at this tempo and still swing.
  - The sax lead is independent of the brass (measures 45); doubled an octave lower (measure 46 into 47) and contrary motion (measure 47). This flexibility is quite common and allows the arranger a full scope of possibilities.
  - All inner voices move and make sense independently. This is always important in a relatively fast ensemble to maintain the strength from the inner voices that is needed for blend and cohesion.
  - The rhythmic patterns and melodic articulations are specifically indicated and lend themselves to both this tempo and musical style.

## CAN'T BELIEVE IT BLUES

TEMPO: Q.N. = 96

Arranged and Composed by Dick Grove

STYLE: Jazz/Rock

Measures 25, 26

Ex. #618

The voicings in this example are based on sources 2, 6, 23 and 26, Table 30, 51, 52, Table 31.

SC



- 63) Here is an illustration of both the lead alto and trumpet doubling in the same octave. This adds a very full dimension to the ensemble by virtue of the sax section register.
- 64) You will notice the saxes (in open voicing) add some notes omitted by the brass, such as the baritone sax at point 1.
- 65) This general ensemble register is extremely effective in producing the round, full timbre typical of the Basie band ensembles. The dynamic level in this example also contributes to the overall blend of the ensemble.
- 66) By the use of open, flexible voicings in all sections, the arranger can always CONTROL his voicing and manipulate the relationship between the sections in a variety of ways.

## — INTERLUDE

TEMPO: Q.N. = 192

STYLE: Jazz/Rock

Arranged and Composed by Dick Grove

Measures H1 to H4

Ex. # 619

The musical score for Ex. # 619 is written for a six-piece ensemble. The staves are labeled as follows:

- TRPTS** (Trumpets): Handwritten label with an arrow pointing to the staff.
- TRBS** (Trumpets/Baritone Sax): Handwritten label with an arrow pointing to the staff.
- ALTOs** (Alto Saxophones): Handwritten label with an arrow pointing to the staff.
- TEN 2/BARI** (Tenor 2/Baritone Sax): Handwritten label with an arrow pointing to the staff.
- GTR/PNO** (Guitar/Piano): Handwritten label with an arrow pointing to the staff.
- BASS** (Bass): Handwritten label with an arrow pointing to the staff.

The score is in 4/4 time and includes several handwritten annotations:

- f** (forte) is written above the first measure of the TRPTS, TRBS, and ALTOs staves.
- H1**, **H2**, **H3**, and **H4** are circled and placed above the ALTOs staff in measures 1, 2, 3, and 4 respectively.
- Cm7/f** is written above the GTR/PNO staff in measure 1.

The voicings in this example are based on sources 4, 26 (with pedal), Table 30; 49, 49 (with pedal), Table 31.

SC

- 67) The brass voicings are affected a great deal by the register the lead is in. This usage of a triad shape with the 4th trumpet doubling lead an octave lower is a standard approach when the lead goes above the staff. It creates a more modern brass sound than block voicings for trumpets.
- 68) The trombones are completing the four part chords. However, the 4th trombone adds a pedal "F," occasionally creating five part density. This pedal "sound" is typical of jazz/rock harmonizations.
- 69) Only four saxes are voiced in this example as the 1st tenor is taking a solo. The saxes form a triad in the top three voices. The baritone either adds the pedal "F" (like the 4th trombone) or doubles lead alto an octave lower.
- 70) The bass line is a typical rock two measure repetitive pattern, playing against the ensemble voicings. Notice that the bass pattern also reinforces the "F" pedal.

## CHICKEN LITTLE

TEMPO: Q.N. = 200-240

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 79 to 82

Ex. # 620

Handwritten musical score for measures 79-82 of "CHICKEN LITTLE". The score includes staves for Trumpets, Trombones, Tenor 1 (solo), Tenor 2, Baritone, Piano, and Bass. The key signature is one flat (Bb). The tempo is Q.N. = 200-240, and the style is Jazz. The arrangement is by Dick Grove, measures 79 to 82.

Measures 79-82 are circled in the score. The piano part includes the following chords and bass line:

- Measure 79:  $Dm^{11}$ ,  $Eb9(+11)$
- Measure 80:  $Bb6^9$ ,  $Ab9(+11)$
- Measure 81:  $F^{13}(+11)$ ,  $Eb^{13}(+11)$
- Measure 82:  $G$ ,  $Dm^i$

The voicings in this example are based on sources 4, 24, 25, 26, Table 30; 54, 55, Table 31.

SC

- 71) Like the previous example, the trumpets are voiced in triads with the lead doubled an octave lower. This doubled lead adds strength to the melody and helps avoid the necessity of writing the trombones higher, thereby allowing the trombones to play in a register where they have more strength and fullness. This is particularly true the higher the trumpet lead goes.
- 72) By utilizing saxes mostly in 4ths in the top part of their range, a very brilliant, modern addition to the ensemble is attained. The FORTE dynamic is consistent with the registers of all the sections.
- 73) Using the saxes in their top range does not detract from the span of orchestration because of the high trumpets. The span varies from  $2\frac{1}{2}$  to 3 octaves throughout this passage.
- 74) Overall, the higher levels of density (five part to six part) and the use of 4th voicings produce a highly sophisticated, modern big band ensemble sound.



## DAY IN, DAY OUT

TEMPO: Q.N. = 100

Arranged by Dick Grove

STYLE: Boogaloo

Measures E9, E10

Ex. # 621

Handwritten musical score for "DAY IN, DAY OUT" by Dick Grove, measures E9 and E10. The score is for a five-piece band: Trumpets (TRPTS), Trombones (TRBS), Alto Saxophone 1-2 / Tenor 1 (ALS 1-2 / TEN. 1), Tenor 2 / Baritone (TEN. 2 / BARI), and Bass (BASS). The key signature is B-flat major (two flats). The tempo is marked "Q.N. = 100" and the style is "Boogaloo". The score shows measures E9 and E10. The bass line is marked "DB/EB" and "GTR/PNO". The tenor 2/baritone part is marked "f." and "GTR/PNO". The alto saxophone 1-2/tenor 1 part is marked "f." and "GTR/PNO". The trumpet and trombone parts are marked "f." and "GTR/PNO". The score is handwritten and includes various musical notations such as notes, rests, and dynamic markings.

The voicings in this example are based on sources 4, 24, 25, Table 30; 49 (with pedal), Table 31.

SC

- 75) This example, again showing the use of triads with lead doubled an octave lower and the presence of a pedal "Eb" in the 4th trombone and baritone, is included to point out another factor:
- 76) Notice how, by use of ADJACENT DEFINITIVE TRIADS (review Table 19, Chapter 14), this melody from an Eb Mixolydian Mode is easily harmonized. The adjacent triads produce several important attributes:
- a) All inner voices move naturally and effectively, either following the shape of the melody or in CONTRARY MOTION to the direction of the melody.
  - b) A consistency of voicing is maintained throughout the passage.
  - c) The triad voicing approach works equally well with brass and saxes creating a controlled ensemble voicing.

#### MIXED INSTRUMENT FAMILIES

- 77) This final series of examples will illustrate some of the less stereotyped voicings that can be used to produce fresh interesting sounds that are both intriguing and sophisticated.
- 78) Try to relate the SOURCES of the voicing to the orchestrations in the examples. You will notice an increased use of open and closed 4ths, diatonic clusters and higher levels of density. The point is, of course, that these more advanced sources of note combinations, lend themselves to an orchestration of MIXED INSTRUMENT FAMILIES.

## NIGHTHAWK

TEMPO: Q.N. = 192

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 29-34

Ex. #622

Handwritten musical score for measures 29-34 of "Nighthawk". The score is for a jazz ensemble and includes parts for 4 Traps, 2 Traps, Flute 8va, Alto, Bb Clarinet, and Bass. The key signature is one flat (Bb), and the time signature is 4/4. The tempo is marked as Q.N. = 192. The style is Jazz. The score shows measures 29, 30, 31, and 32. The bass line includes chord markings: Fmi, Ebmi, Fmi, and Ebmi. The alto part has circled measure numbers 29, 30, 31, and 32. The flute 8va part has a circled measure number 31. The traps parts have a circled measure number 31.

Cont. on Next Page

The voicings in this example are based on sources 8, 22, Table 30; 33, 34, Table 31.

SC

- 79) This is a very good example of both an application of 4th structures and mixed voicings. This particular register enables the trumpets to use a more open 9th interval spread while only two trombones are added to complete the brass section at this point.
- 80) The woodwinds and alto sax are strictly based on the brass voicing and function as octave, 3rd and 5th melodic couplings.
- 81) The  $2\frac{1}{2}$  octave span of orchestration adds highs to the voicing. This is where addition of the flute becomes important.
- 82) Relate as many of these voicings as you can to those shown in Table 24, Chapter 16.
- 83) The significance of this example is in the unique effect resulting from consistent use of special 4th voicings and the particular orchestration of those voicings.

## SOUNDSCAPE

TEMPO: Q.N. = 162

STYLE: Latin/Jazz

Arranged and Composed by Dick Grove

Measures 160-163

## Ex. #623

Handwritten musical score for measures 160-163. The score is written on seven staves, each with a 3/4 time signature. The instruments and parts are labeled as follows:

- Trombones 1-2-3:** Measures 160-163.
- Trombones 4-5:** Measures 160-163.
- Fl. H.A.N.:** Measures 160-163.
- Trombones 1-2-3:** Measures 160-163.
- FLUTE 1-2-CLAR:** Measures 160-163.
- TENOR SX:** Measures 160-163.
- Gtr (add X):** Measures 160-163.
- GTR/PNO:** Measures 160-163.
- BASS:** Measures 160-163.

The score includes measure numbers 160, 161, 162, and 163. The notation includes various musical symbols such as notes, rests, and dynamic markings.

The voicings in this example  
are based on sources 4, 5, 25,  
Table 30, 33, 37; Table 31.

SC

- 84) This composition makes use of the clustered and closed 4th sound throughout. The point in the chart where this example occurs therefore provides a continuity of approach.
- 85) The effect is that of a sophisticated, controlled ensemble and the composition itself was written with this "sound" and orchestration in mind. This is why the theme is made up of REPEATED NOTES and directional PARALLEL melodies. These characteristics enabled me to SET UP and maintain this closed 4th and triadic sound.
- 86) Note the interesting doubling of the same closed 4th in the woodwinds, trumpets and trombones. This is quite valid and checks out with the principles brought out in the Basic Instrument Ranges and Tables 15 and 16 in Chapter 12.
- 87) Also note the contrary motion bass line in the last two measures, played by the bass and single note guitar.

## SNEAKY PETE

TEMPO: Q.N. = 160

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 33-36

Ex. #624

The voicings in this example are based on sources 4, 24; Table 30; 35, 36, 37; Table 31.

SC

- 88) Four factors are involved in this example. First, the top four brass voices are based on diatonic and chromatic shapes (see Chapter 14), with lead doubled an octave lower in the 2nd trombone.
- 89) Secondly, the woodwinds follow the lead, utilizing various melodic couplings.
- 90) Third, a concerted, but independent bass line plays against the remaining ensemble in parallel and contrary directional lines.
- 91) Fourth, the orchestration adds color to the three factors just mentioned. Note the doubling of the two trumpet voices with an open trumpet on each voice and a contrasting muted trumpet on each voice.
- 92) The color added by the mutes fuses and mixes with the woodwinds in the octave above the trumpets. The two open trumpets give strength to the melody and balance with the 1st and 2nd trombones as a mixed section.
- 93) The orchestration of the bass line is made up of the 3rd trombone, bass clarinet, guitar and bass, creating a strong yet warm orchestral color.

## MISTER BLUE

TEMPO: Q.N. = 136

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 177 to 180

Ex. #625

Handwritten musical score for "MISTER BLUE" (Measures 177 to 180). The score is written on six staves. The top staff is for TRPTS. (Trumpets), the second for TRBS. (Trombones), the third for WOODWINDS (Flute, Sopranino, Clarinet, Bass Clarinet), the fourth for ELE. GTR. (Electric Guitar), the fifth for RHY. GTR. (Rhythm Guitar), and the bottom staff for BASS. The key signature is B-flat major (two flats). Measure numbers 177, 178, 179, and 180 are circled. Chord symbols F7(b9), D7(b9), C#7(b9), and D7(b9) are written above the RHY. GTR. staff. The notation includes various musical symbols such as notes, rests, beams, and dynamic markings like 'f'.



The voicings in this example are based on sources 7, 27, Table 30; 36, 39; Table 31.

SC; RS PE911; CC

- 94) This ensemble passage is a good example of the application of panel H from Table 28, Chapter 17. It is a six part density voicing employing the following combination of plural chord relationships (see point 1).

PANEL H, TABLE 28

Ex. #625

High Pitched Instruments Abmi7	TRANSPOSED EQUIVALENT OF:	H.P.I. Bbmi7
Low Pitched Instruments F7(b9)		L.P.I. G7(b9)
High Pitched Instruments Bmi7		H.P.I. Bmi7
Low Pitched Instruments D7(b9)		L.P.I. G7(b9)

- 95) The woodwind sax triadic voicing is a doubling of the trumpet four part chord. At point 1, the trumpets play an Abmi7, the woodwind/sax triad is an Abmi triad.
- 96) At point 2, the trumpet/trombone/bass relationship again conforms to panel H from Table 28. The woodwind/sax triad voicing is a Bmi doubling of the Bmi7 played by the trumpets.
- 97) One of the important by-products of this particular voicing approach is the consistent density-section voicing sound. It is a more sophisticated jazz ensemble effect. If you listen to the recording of MISTER BLUE, you will note the overall cohesion of this voicing approach and the basic thematic material, producing a good example of melodic and harmonic continuity.



## MISTER BLUE

TEMPO: Q.N. = 136

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 36, 37

Ex. # 626

TRP

TRBS

FLUTE  
TENOR

CLAR.

(36)

(37)

ELEC. GTR

BASS

The voicings in this example are based on sources 7 and 27, Table 30; 34, 47; Table 31.

SC

- 98) The brass voicings in this example are similar to the previous example. They are six part density voicings, constructed in the same manner from Panel H, Table 28, Chapter 17.
- 99) The woodwind/sax voicing is, however, melodic couplings of the melody and a perfect 5th below the melody.
- 100) The significance of this variation is the reinforcement of the melody (by flute, tenor and electric guitar) and the obvious point that a more dense ensemble voicing is still possible. When this more dense voicing is used later, it produces a more climactic effect. This, again, shows how CONTROL of density and choice of voicings can contribute greatly to the overall harmonic shape of an arrangement.

### DIALOGUE FOR TRUMPET, ALTO AND ORCHESTRA

TEMPO: O.N. = 200-224

Arranged and Composed by Dick Grove

STYLE: Jazz/Modal

Measures 146 to 153

#### Ex. #627

The musical score is for measures 146 to 150. It features seven staves with the following parts and markings:

- TRUMPET:** Measures 148-150. Handwritten note: "TRUMPET 1-2-3". Dynamic: *mf*. Rehearsal marks (1) and (2) are above measures 148 and 149 respectively.
- BRASS:** Measures 146-147. Handwritten note: "BRASS 1-2-3". Dynamic: *mf*. Rehearsal mark (146) is below measure 146.
- ALTO SAXOPHONE:** Measures 148-150. Handwritten note: "AL." above measure 148. Dynamic: *mf*. Rehearsal marks (148), (149), and (150) are below measures 148, 149, and 150 respectively.
- TENOR SAXOPHONE:** Measures 148-150. Handwritten note: "TEN" above measure 148. Dynamic: *mf*. Rehearsal marks (148), (149), and (150) are below measures 148, 149, and 150 respectively.
- BASSOON:** Measures 146-147. Handwritten note: "BASSOON" above measure 146. Dynamic: *mf*. Rehearsal mark (146) is below measure 146.
- ELECTRIC GUITAR:** Measures 146-147. Handwritten note: "GTR." above measure 146. Dynamic: *mf*. Rehearsal mark (146) is below measure 146.
- BASS:** Measures 146-147. Handwritten note: "BASS" above measure 146. Dynamic: *mf*. Rehearsal mark (146) is below measure 146.

The score is in 3/4 time and features a variety of musical notations including eighth notes, quarter notes, and chords. The dynamic *mf* (mezzo-forte) is consistently used across the ensemble.

The voicing in this example is based on sources 4, 25, Table 30; 49, Table 31.

SC

- 101) This mixed voicing combines three trombones (in a 4th structure) and baritone sax. Although the baritone is doubling the lead trombone an octave lower, he is actually functioning as a pedal, with guitar and bass. This use of the baritone with trombones is quite conventional for two reasons:
- 1) To take the place of a bottom fourth voice when only three trombones are available and;
  - 2) To produce the mixed orchestral sound of the baritone with trombones, adding its gutty, round qualities to the trombones.
- 102) The combined trumpet, altos and tenor saxes are based on diatonic triads from the Locrian Modal scale.
- 103) This is also an example of dividing the band into TWO SMALLER BANDS, in this case setting up a question-answer format.

## HOME COOKIN'

TEMPO: Q.N. = 160

STYLE: Funky/Gospel

Arranged and Composed by Dick Grove

Measures A to F

Ex. #628

Handwritten musical score for "HOME COOKIN'". The score is in 3/4 time and features a question-answer format across measures A to F. The staves are labeled as follows:

- TRP 1: 1-5 F.M. 2-CUP 3-4 OPEN
- TRBS 1-2: 1-2
- Sop. Sax: A
- TEN. Sax: B
- RHYTHM TACIT

The score includes various musical notations such as notes, rests, and dynamic markings.

The voicings in this example are based on sources 2, 22, Table 30; 47, Table 31.

SC

- 104) Although the type of voicing in this example is rather obvious and simple, it is not a conventional sound in terms of big band writing. The unique quality comes from the open intervals between the brass, and the melodic coupling of a major or minor second or ninth between the trumpet lead and the saxes.
- 105) The trumpets are doubled on each note, one open and one muted in each instance. The brass voicings are quite acceptable purely from the standpoint of the intervals formed between the notes. They can be thought of as a triad with the middle voice dropped an octave.
- 106) The slurs into each sax note add a broader effect to the simple rhythmic pattern and help set up the style and mood of the composition.
- 107) This entire introduction is basically melodic with the added harmony being secondary.

## MISTER BLUE

TEMPO: Rubato

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 1 to 3

## Ex. #629

Handwritten musical score for "MISTER BLUE" measures 1 to 3. The score is for a big band and includes staves for Trumpets (2-3), Trumpets (1-2), Saxophones (Sax), and Bass Solo. The tempo is marked "RUBATO". The key signature has two flats (B-flat and E-flat). The score shows complex voicings with many beamed notes and slurs. Handwritten annotations include "m2" (minor second) and circled numbers 1, 2, and 3. The bass line is marked "BASS Solo" and "F7(b9)".

The voicings in this example are based on sources 5, 25, Table 30; 49, Table 31.

SC

- 108) Example 629 illustrates an application of open 4th structures as detailed in Table 23 (Example g), Chapter 15. This four part density voicing is quite effective in this relatively low range. Notice the division of the voicing between the trumpets and trombones.
- 109) The three saxes have been assigned the top three voices of the 4th structure. These voices comprise a triad shape. The orchestral blend between all seven instruments is then a result of the doubling of the notes involved.
- 110) Notice that the harmonization of the melodic phrase is a parallel usage of this one particular open 4th structure. The harmonic implication of this structure (as detailed in Table 22, g) is a Dom. 7th (+9). There is also a PLURAL RELATIONSHIP to the Dim. 7th chord family (see Table 29, Panel K), notice for example the first chord. In this specific example, a Bb when transposed to our

excerpt from MISTER BLUE would be  $\frac{Ab}{C^{\circ}7}$

$D^{\circ}7$

In summary then, these voicings could be considered MELODIC COUPLINGS to the melody attaining the effect of a reharmonization. (Review Example 365, Chapter 9.)

## CANTO II

TEMPO: Q.N. = 144

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 29 to 32

## Ex. #630

The voicings in this example are based on sources 2, 4, 22, 24; Table 30, 34, 37; Table 31.

SC

- 111) Example 630 utilizes PARALLEL CLOSED 4TH STRUCTURES. Although the brass voices comprise a triad shape with melody doubled an octave lower, the overall voicing is actually a closed 4th structure. The clarinet voice is the third note of the structure, inverted up an octave.
- 112) The bass/guitar/piano line is a low counter-melody that rhythmically plays against the rhythm of the ensemble.
- 113) The orchestration is basically open brass stating the triad shape. The 4th trumpet in Harmon mute blends with the woodwind/alto sax voicing. This is a very intense sound and should draw special attention when listening to the supplementary cassette.

## CANTO II

TEMPO: Q.N. = 144

Arranged and Composed by Dick Grove

STYLE: Jazz

Measures 129 to 132

### Ex. #631

Handwritten annotations in the score include:

- Trms 1-2-3** (with an arrow pointing to the first staff)
- mf** (mezzo-forte) in the first staff
- Trms. 3** (with an arrow pointing to the second staff)
- FLUTES** (with an arrow pointing to the third staff)
- CLAR.** (with an arrow pointing to the fourth staff)
- mf** (mezzo-forte) in the fourth staff
- (B. CLAR)** (with an arrow pointing to the fifth staff)
- GTR** (with an arrow pointing to the sixth staff)
- BASS/PNO.** (with an arrow pointing to the seventh staff)
- Circled measure numbers: **(129)**, **(130)**, **(131)**, and **(132)**



The voicings in this example are based on sources 2, 9, 21 Table 30; 33, 41, Table 31.

SC

- 114) This example is basically **CLOSED 5TH CLUSTERS** distributed between trumpets and woodwinds. Even though the separated trumpet voicings are sometimes triads, sometimes a 5th with an inner voice, they need to be analyzed from the standpoint of the two sections together.
- 115) The division of the **CLOSED 5TH CLUSTERS** between the trumpets and woodwinds is predicated on eliminating adjacent half steps in the same instrument family (see Chapter 15, Basic Technique No. 12).
- 116) A slower moving bass line played by a trombone, bass clarinet, guitar, piano and bass works very effectively against the clusters and broadens the total span of orchestration to four octaves in spots.
- 117) Like Examples 630 and 632 this application of clusters (as well as closed 4ths) has as its most effective setting, **DIATONIC MODAL SOURCES**.

TEMPO: Q.N. = 144

CANTO II

STYLE: Jazz

Arranged and Composed by Dick Grove

Measures 215 to 218

Ex. #632

Handwritten musical score for measures 215 to 218. The score is written on six staves, each with a key signature of one flat (Bb) and a common time signature (C). The staves are labeled as follows:

- TRUMPETS:** The top staff, with a handwritten "TRUMPETS" and a bracket indicating a "FLUGELHORN SOLO" section. The notation shows sustained chords with slurs.
- FLUGELHORN SOLO:** The second staff, featuring a solo line with eighth and sixteenth notes.
- FLUTE:** The third staff, with a handwritten "FLUTE" and a bracket indicating a "CLAR." section. The notation shows sustained chords with slurs.
- B. CLAR.:** The fourth staff, with a handwritten "B. CLAR." and a bracket indicating a "CLAR." section. The notation shows sustained chords with slurs.
- BASS:** The bottom staff, with a handwritten "BASS" and a bracket indicating a "CLAR." section. The notation shows a moving bass line with eighth and sixteenth notes.

Measures 215, 216, 217, and 218 are circled at the bottom of the score. The score includes various musical notations such as slurs, ties, and dynamic markings (e.g., *f*, *mi*).

The voicings in this example are based on sources 2, 9, 22; Table 30; 33, 45, Table 31.

SC

- 118) This final example shows another divided orchestration of a diatonic cluster between two trumpets in cups and two flutes and a clarinet. As pointed out in the previous example, the division of instrument families circumvents any adjacent half-step relationships.
- 119) It is quite interesting that the long sustained use of the cluster creates a most effective application. The sound is so compelling that the prolonged usage enables the listener to really hear this delicate voicing. This is in direct contrast to the use of fast-changing sophisticated voicings that often fall short in effect because the ear cannot assimilate the subtleties when each is only heard a fraction of a second.
- 120) The two trombones on cups and bass clarinet are playing a repetitive figure. The 2nd trombone and bass clarinet are actually playing the melody of the figure while the 1st trombone has a harmony note ABOVE.

#### SUMMARY

- 121) This chapter has brought together our study of specific voicing possibilities from one to eight levels of density and related to various orchestral approaches ranging from standard section voicings to more stylistic mixed voicings.
- 122) The 36 concert sketches illustrate not only the principles and approaches mentioned above, but explain many of the thoughts behind these examples and relate these thoughts back to various sections of this book where they were introduced and detailed.
- 123) All of these examples should be analyzed from the standpoint of the level and weight of density and span of orchestration used.
- 124) Because all these examples are recorded on the supplementary cassette, you can hear, read and relate these many illustrations to your own comprehension of the materials covered. You have the logical tool with which to not only review your studies, but to put in order, once and for all, the underlying principles inherent in our music and, most important, **DRAW YOUR OWN CONCLUSIONS AND REACTIONS.**

#### ANALYZATION OF SCORES

- 125) I would suggest that you do a substantial amount of analyzation of scores involving ensemble and large voicings. Regardless of the level of density (3 through 8), you can relate ANY voicing and orchestration of that voicing to Tables 27, 28 and 29.
- 126) If you run across a voicing that is not presented in the specifid PLURAL CHORD RELATIONSHIPS stated in these three tables, break down the voicing in terms of the PLURAL RELATIONSHIPS and add the possibility to the appropriate panel.
- 127) A sustained amount of analysis will help a great deal towards gaining familiarity with these relationships and conditioning your ear and your thought processes to identify specific sounds easily and to develop speed and facility.
- 128) When breaking down a voicing from a score, you now have the following specific terminology to accurately pinpoint any voicing. Analyze in these terms:
  - a) LEVEL OF DENSITY: Indicated 4, 6, 1, etc.
  - b) SPAN OF ORCHESTRATION: Indicated 1, 1+, 4, 2— (review Example 592).



## c) PLURAL CHORD RELATIONSHIP: Indicated:

INTERIOR CHORD OF HIGH PITCHED INSTRUMENTS  
 BASIC CHORD OF LOWER PITCHED INSTRUMENTS

## d) ORCHESTRATION: Indicated by abbreviations:

Br. (Brass);  
 Tp. (Trumpets);  
 Tb. (Trombones);  
 Sx. (Saxes);  
 Ww. (Woodwinds);  
 Mixed (Mixed orchestration from all sections);  
 Ens. (All sections voiced as complete separate sections  
 that together effect an ensemble).

- 129) The above terms give you the exact measurement of the essential factors. This allows you to draw your own comparative and comprehensive conclusions regarding any orchestral voicing.
- 130) The reason for this detailed summarization of these approaches is to give you a specific point of reference for most of the decisions you will have to make. These Tables (and Tables 27 through 31) and, for that matter, all the information in the book is not particularly meant to be memorized. You will gain familiarity by using and referring to the information and by RELATING the terminology to SOUNDS.
- 131) Even aspects not specifically covered in this book CAN be taken apart and identified, enabling you to draw your own conclusions and thereby add new approaches and effects to your collection of impressions and techniques.
- 132) A complete list of available reference scores and cassette recordings is presented in the appendix. These scores and recordings are from many of the examples I have used, to provide a continuity to your study.
- 133) The same awareness that comes from the analyzation of scores gives you the foundation to effectively relate to your own writing the countless decisions you will have to make.



## SECTION V — WRITING THE ARRANGEMENT

### Chapter 19: First Considerations — Optional Instruments

- 1) The first four sections of this book have classified and detailed the components and techniques that make up a large portion of the factors involved in arranging.
- 2) Each of the points covered only has importance and validity when it becomes an active part of the arranging process. This process starts with the writer's goal, and his conception of that goal.
- 3) The factors discussed up to this point now have to be related to this goal and the limitations under which you must write.
- 4) The purpose of the remainder of this book has to do with the relating of previous techniques covered to the development of a working procedure and, finally, the considerations involved in working with these materials towards specific technical and conceptual goals.

#### FIRST CONSIDERATIONS

- 5) The first considerations before you start writing are the restrictions automatically imposed by the purpose and use of the arrangement.

#### INSTRUMENTATION

- 6) The specific breakdown of instruments that you will write for immediately relates to how you will apply the concept of density. In a secondary way, the instrumentation (along with style and concept) will dictate the type of voicings and sounds you can choose from. In any event, you must, of course, always pin down the exact instrumentation.

#### INSTRUMENT DOUBLINGS

- 7) Along with the instrumentation comes the matter of settling the available doubles in the different instruments.

#### 8) TRUMPETS

- a) You can usually assume the normal variety of mutes. Check specifically if buckets or hats are available.
- b) Flugelhorn is becoming more and more available. You need to know how many, on what trumpet chair and, hopefully, the level of proficiency on the instrument.
- c) What is the lead trumpet range? Is the trumpet section set up to split lead? What is the endurance of the lead trumpet, and the section?
- d) Who improvises? On what chair? What is his most effective style? Does he read chord symbols? If no one improvises, a written solo is your best protection.

9) LOW BRASS

- a) How many tenor and bass trombones? What is the range of the lead trombones? Is there a valve trombone in the section?
- b) Who improvises? What chair does he play? His best style?
- c) Again check availability of buckets.
- d) Other low brass instruments and their ranges and facility: French horns (how many); mellophones; baritone horns; tuba (which tuba does he play?).

10) SAX SECTION

- a) Who improvises? What chair? Facility? How many?
- b) Woodwind doublings can differ from band to band. Younger bands may have weak woodwind doubles and you must compensate accordingly.

11) RHYTHM SECTION

- a) PIANO: Level of reading, improvising and comping ability.  
DOUBLES: Electric piano, organ, celeste, etc.
- b) BASS: Acoustic (with pickup?), fender or electric bass. Can he read? Can he play from chord symbols?
- c) GUITAR: Reading level; improvising and comping ability?  
DOUBLES: Acoustic, 6 string, etc.  
ATTACHMENTS: Fuzz, wah, wah, etc.
- d) DRUMS: Reading ability? Can he take solos? Does he know styles? ... Swing ... Rock, etc.

- 12) In many situations you will not be able to get answers to all of these questions. In the event you can't, you must rely on practical brass ranges (see Chapter 1), conventional woodwind doublings (see Chapter 14), and generally accepted rhythm section instrumentation.

OPTIONAL INSTRUMENTS

- 13) In some situations arrangements need to be written in such a way as to allow fewer instruments to play the chart than the full instrumentation. This is typical of charts for singers whose size of band varies from one engagement to another.
- 14) The following instrumentation breakdowns are typical of the optional requirements you may have to write for:

The numbers in parentheses indicate the smallest number of instruments with which the chart can be played:

- |                           |                           |
|---------------------------|---------------------------|
| a) Trumpets 5 (4)         | b) Trumpets 4 (3)         |
| French Horn 2 (0)         | Trombones 4 (3) or (2)    |
| Trombones 5 (4)           | Saxes 5 (4)               |
| Saxes 5 (4)               | Rhythm & Percussion 5 (3) |
| c) Trumpets 4 (2)         | d) Trumpets 3 (2)         |
| Trombones 3 (1)           | Trombones 2 (1)           |
| Saxes 5 (3)               | Saxes 4 (3)               |
| Rhythm & Percussion 5 (3) | Rhythm 4 (3)              |

- 15) The GENERAL MISCONCEPTION when approaching this problem is thinking in terms of voicings that fit the larger instrumentation, trying to compensate for the optional instruments by leaving out notes in the voicings.
- 16) The density concept presents a much simpler approach that works because it is built on the fact that the smallest number of instruments available realistically dictates the level of density from which you insure a good sound. Once this is established the additional instruments are treated as doubles and added notes, always striving to make logical voiceleadings and parts for the extra horns.
- 17) The other advantage in the application of the density concept is the working procedure of the sketch. By the sketch I mean that we write those voicings that are within the levels of density dictated by the smallest number of instruments, and THEN assign the instruments. This allows us to create voicings made to order for the specific situation.
- 18) An example would be writing a chart for instrumentation c). In this case there is a variance of 12 horns to 6. This is quite extreme in its demands. The mistake would be to think in terms of FULL SECTIONS when determining your 6 horn voicings.
- 19) I can still, with six horns, have a very full ensemble sound (handling for example, all four, five and six part chords) if I think of the six available horns as a section complete within itself.
- 20) The six horns would be: 2 trumpets, 1 trombone, 1 alto, 1 tenor and 1 baritone.
- 21) An ensemble voicing of a G9 ("D" melody) would be:

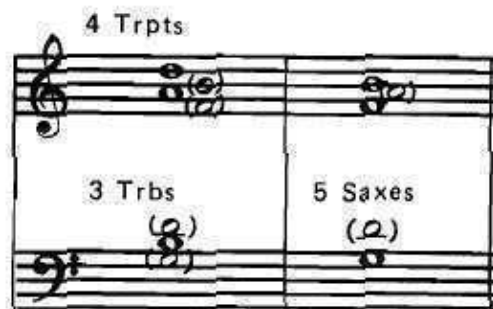
Ex. #633

Trpt  
Alto  
Trpt  
Tenor  
Trom  
Bary

Black Note Heads

- 22) At this point I am assured a full five part voicing. I still need to fill in the remaining optional instruments: 2 more trumpets, 2 trombones, 2nd alto and 2nd tenor. My objective as I fill these in is to form conventional SECTION VOICINGS.

Ex. #634



- 23) As I would deal with a complete phrase the consideration of a horizontal voiceleading for ALL instruments would many times suggest doublings and optional notes. Whatever the particular instrumental problem my goal is the same: to write realistically for the smallest number of instruments, and AT THE SAME TIME create conventional section voicings with the addition of the optional instruments.
- 24) The more extreme the number of optional instruments, the less flexibility of voicing and orchestration is possible. You would also be forced to use more instruments more of the time because of a smaller number of available horns.
- 25) To illustrate the comparative approaches to writing for optional instruments, Example 635 will be voiced for each of the instrumental breakdowns listed in Paragraph 14, a, b, c and d.
- 26) These examples are voiced from four to six part density to achieve a full ensemble sound. The notes indicated in parentheses represent the optional instruments that would be added to fill out the possible maximum horns in each section.

Ex. #635



Ex. #636

Trpts.

Trpt. V  
Fr. Horns

Trbs.

Trom. V

a) Combination

2 Altos

2 Tenor

1 Tenor

Baritone

Ex. #637

b) Combination

(Saxes same as Combination a)

Ex. #638

Trpts.

Trbs.

c) Combination

2 Altos

2 Tenors

Baritone

Ex. #639

d) Combination

(Saxes same as combination c)

- 27) Writing for optional instruments is demanding because of having to check out your voicings from two standpoints.

### KEY SIGNATURES

- 28) Certain key signatures create a problem, especially when transposed for the saxophone family, but also for some of the brass family. The concert Key of B presents the most trouble.

Concert B -----	{	Eb Instruments — G# (no such key signature) Bb Instruments — C# (7 sharps) French Horn in F — F# (6 sharps) Concert Instruments — B (5 sharps)
-----------------	---	---

- 29) Obviously, because there is no key signature of G#, the alto and baritone saxes must use the signature of Ab. Bb instruments, such as soprano, tenor, bass sax, trumpet and clarinet are more practically transposed into the key of Db (5 flats being easier than 7 sharps).
- 30) The French Horn in F, having either a choice of F# or Gb (6 sharps or flats), is usually easier to score in flats, keeping it consistent with the Eb and Bb instruments.
- 31) Trombones, flutes, oboe, percussion and rhythm section would remain in the key of B rather than change to Cb (7 flats).

### PICKING A KEY

- 32) Once a specific instrumentation has been determined the problem of choosing a key or series of keys comes up. Some situations may dictate the key. For example:
- a) A vocalist's specific key;
  - b) Any arrangement involving singing, such as vocal groups, duets, choirs, etc.
- 33) It often is the arranger's responsibility to help determine vocal keys. Although you may know the singer's preferred range, it is always best to check a proposed key by having the vocalist sing the entire chorus. A tune may lay mainly in the top or bottom of a singer's range, thereby necessitating an adjustment to find an even more comfortable key.
- 34) The actual process of quickly determining a key in relationship to a singer's range is this:
- a) Determine the comfortable top and bottom of the singer's range;
  - b) Determine the scale degree or solfeg syllable that represents the highest and lowest note of the tune;
  - c) The singer's highest note becomes the scale degree or solfeg syllable of the key you will use;
  - d) The singer's lowest note becomes the scale degree or solfeg syllable of the key you will use;
  - e) If the singer's range is greater than the range of the tune, the top or bottom note can be adjusted to reach a more comfortable key.



- 35) To work through this process we will assume:
- a) The sheet music or lead sheet has a top note of E, and a bottom note of A. The sheet music key signature is F, making the top note E the 7th scale degree or the solfeg Ti. The low note A is the 3rd scale degree of the solfeg Mi.
  - b) The singer's top note is C. This automatically becomes Ti or VII and we would be in the key of Db.
  - c) The singer's bottom note is F. This becomes Mi or III and we would be in the key of Db.

### INSTRUMENTAL KEYS

- 36) Suggested practical ranges for brass, saxes and woodwinds were defined in Chapter 14, Paragraphs 97 through 117.
- 37) The same process of relating your lead sheet key to these ranges would apply. You would first need to determine the type of arrangement you are writing, as this would tell you the effect of brass range or whether you would be dealing with woodwind, saxes or both.
- 38) To build a climactic peak you might wish to melodically go ABOVE the top note of the composition. In this situation, this arbitrary note would be the determining factor in picking the key.

### MODULATIONS

- 39) Certain instrumental arrangements, particularly of more commercial types of tunes, often are enhanced by a change of key. This can be as obvious as modulating up a half step at the end of each chorus, achieving a gradual build.
- 40) This is more effective in compositions that contain non-modulatory progressions.
- 41) Another reason for modulating would be to arrive at a more effective key with which to feature a certain section or solo instrument in the band. This thinking is certainly a possibility in all situations and should be kept in the back of your mind at all times.
- 42) As you gain more experience in picking keys, you will find that the standard keys of most tunes are about a third interval too high. By moving a standard key from Eb to C, for example, you will usually be able to harmonize the melody in two different registers, thus achieving a flexibility of treatment that is very important.

### PICKING A TEMPO

- 43) A tempo, reflecting the style and effect of your chart, is usually picked first. With a particular tempo in mind the melodic phrasing is determined in relationship to this tempo.
- 44) The critical area is to be careful of certain rhythmic patterns in the composition. A very individual or contrasting pattern should be checked to assure a comfortable "feel" at the tempo you are using.
- 45) With most rock compositions you will find a very slim margin of flexibility in tempo from the original version. However, by changing the stylistic conception from rock to jazz you will often be able to use a new tempo.
- 46) The above point many times brings into play the rhythmic variation of DOUBLE METER or HALF METER. These approaches are historically very practical solutions to:
  - a) Playing a ballad in a fast tempo, using double meter.
  - b) Playing a medium to fast tempo in a ballad or moderately slow tempo, using half meter.

### SUMMARY

- 47) Tempos are very crucial to good performances and good writing. Never "sort of" know what tempo you are writing in. Be specific! All your rhythmic decisions are predicated on judging a rhythmic pattern against a predetermined tempo.
- 48) Be sure you do not change your tempo feeling half way through a chart without realizing it. An effective check against this is to constantly go back to the beginning, singing and tapping your rhythmic patterns, in strict tempo.

### PICKING THE TIME SIGNATURE

- 49) Many current big band charts utilize the less-used meters, such as 5/4, 7/4, 9/8, 11/8, etc. Even more conventional 3/4 and 6/8 meters can sometimes be a problem.
- 50) If a composition is originally written in one of these time signatures the chances are that the rhythmic and melodic phrases will be playable and natural.
- 51) There are many more potential hangups when you choose to re-interpret a 4/4 tempo into 5/4, 7/4, etc.
- 52) Although you can mathematically rephrase anything to anything, it will sometimes end up forced, awkward and unnatural. The inspiration of using an odd meter carries the responsibility of the maturity and talent to "bring it off." Don't get carried away. It's too easy for you to end up the loser.

### THE PURPOSE OF THE ARRANGEMENT

- 53) The majority of arrangements in the jazz/rock and commercial idioms fall into four categories. These are:
- a) **PRIMARILY COMPLETELY WRITTEN, ARRANGED INSTRUMENTALS** (very few, if any, IMPROVISED solos). This category would include many of the commercial, dance band and dramatic TV and film arrangements.
  - b) **INSTRUMENTAL ARRANGEMENTS FEATURING ONE OR MORE SOLOISTS.** Most of the jazz, Latin/jazz and jazz/rock charts are in this category.
  - c) **VOCAL BACKGROUND ARRANGEMENTS.** This would cover vocals in all musical styles and idioms, jazz, rock and commercial.
  - d) **ARRANGEMENTS OF EXTENDED COMPOSITIONS.** This rather specialized area involves changing moods, tempos and extended, freer musical forms. It would include rock as well as jazz; commercial and American legit compositions such as **SLAUGHTER ON TENTH AVENUE**.
- 54) By defining these four broad categories we can now isolate the general considerations, restrictions and responsibilities inherent in each one. These points bring out basic conceptual decisions that the arranger should be aware of **BEFORE** he actually starts writing. They are the equivalent of asking yourself: "What do I really need to try to accomplish in this arrangement?" Understanding the particular category and style immediately necessitates the appropriate harmonic manipulation and concept that sets the foundation from which the voicing, orchestration and melodic conception are conceived.

### COMPLETELY ARRANGED INSTRUMENTALS

- 55) Here are some basic conclusions relative to this category:
- a) **An awareness of flow, cohesion, variety of orchestration, mood and effect;**
  - b) **Pacing the treatment of the melodic, accompaniment and rhythmic possibilities to achieve a musically sound product;**
  - c) **Use of thematic continuity in the treatment of melodic, accompaniment and rhythmic possibilities;**

- d) Use of written solos for variation, interest and pacing.

### INSTRUMENTAL ARRANGEMENTS FEATURING ONE OR MORE SOLOISTS

- 56) Considering the fact that this category spans countless tempos, meters and gradations of jazz, Latin/jazz and jazz/rock styles, certain characteristics are important:
- a) Proper proportion of improvised solos in relation to tempo, length of chart and style of composition;
  - b) Careful choice of instruments to be featured as soloist, relative to mood and character of the chart and composition;
  - c) Mature judgment involving the overall reaction of the listener. Awareness of peaks, climaxes or contrasting levels in relationship to the styles and mood;
  - d) Controlled use of DENSITY, WEIGHT and SPAN OF ORCHESTRATION to complement the EMOTIONAL CONTOUR and conception;
  - e) Awareness of your choice of mood (happy, moody, pretty, driving, delicate, funky, bright, etc.);
  - f) Intelligent use of appropriate voicings and orchestration to correspond to the mood of the chart.

### VOCAL BACKGROUND ARRANGEMENTS

- 57) This is a unique category in the sense that the instrumental arrangement REACTS to the vocal.
- a) The importance of the vocal is always greater than the importance of the instrumental ideas. They only complement the vocal.
  - b) The rhythmic phrasings in particular should not conflict with the rhythmic phrasings of the vocal. The majority of rhythmic motion of the band should be confined to the ends of phrases while the vocal is sustained or tacit, and to intros, interludes, turnarounds and endings.
  - c) Normal usage of rhythmically simple PADS as background behind the active vocal phrases.
  - d) Greater value placed on the background arrangement (after the introduction) STARTING VERY SIMPLE, usually with just rhythm section. A gradual increase of density, weight and span of orchestration to achieve a building effect. (This would be proportionately limited in the case of slow ballads. These are often, in effect, only pads of varying degrees of density, weight and span of orchestration.)
  - e) Typical reliance on MELODIC AND RHYTHMIC MOTIFS adding continuity to the chart. This approach also tends to help keep the proper attention on the vocal by the use of more repetitive thematic motifs and phrases. ATTENTION SHOULD BE DIRECTED TO THE VOCAL, and the arrangement, although contributing to the effectiveness, SHOULD NOT DISTRACT FROM THE VOCAL.
  - f) General characteristic of a SMOOTH background: not busy; not too thematically varied; not too loud or independently structured.

- 58) It is suggested that the interested arranger analyze as many recorded vocal background arrangements by big bands as possible. Using manuscript paper with bar lines drawn, verbally indicate the entrances, orchestration and density of the charts as well as recurrences of thematic materials measure by measure.
- 59) A study of twenty to fifty vocal background charts will bring out a very obvious pattern of conception and treatment, relative to tempo and instrumentation.

### ARRANGEMENTS OF EXTENDED COMPOSITIONS

- 60) Arrangements such as these are lengthy charts usually featuring contrasting tempos, moods and varying degrees of new thematic materials. These considerations must be kept in mind:
- 61) Much thought should be given, and many decisions made re, the entire chart before actually writing. Each section or mood has a direct relationship to all other portions. This comparative awareness is vital to writing a successful chart. The arranger, by virtue of the greater length, must sustain interest and mature judgment throughout. A weak or illogical section can ruin an otherwise effective chart;
- 62) A great deal of thought should be devoted to pacing, contrast and emotional contour. The vast scope of the density and span of orchestration concept can provide you with a spectrum of possibilities that allows you the maximum potential when attempting this type of difficult chart;
- 63) Attention should be given to consistent sources of harmonic, melodic and voicing sources. An extended work is still one entity, and abrupt out-of-character judgments tend to make a joke out of an otherwise serious musical endeavor;
- 64) The main point here is that in "stretching" out to an extended length, the arranger is pressed to maintain a consistent product throughout. This is why this category is such a demanding, difficult and ambitious project.
- 65) I have presented conclusions regarding these categories of writing to impress on you an overall awareness of some basic premises which I have arrived at after writing for some twenty years. Your own growth and experience will lead you to similar conclusions. The conscious knowledge of how to conceive an arrangement is a process that I feel can be shortened considerably if you have these points in front of you. Your job is to GO BEYOND THE TECHNIQUES OF WRITING to where you can RELATE THESE TECHNIQUES IN TERMS OF THEIR MUSICAL EFFECT AND HOW THEY CONTRIBUTE TO AN OVERALL CONCEPTION.



## SECTION V -- WRITING THE ARRANGEMENT

### Chapter 20: Concept and Treatment of the Arrangement

- 1) At this point we have established a technical foundation (Section 1), explored melodic handling and variation (Section 2), harmonic problems (Section 3), density (Section 4) and some initial points concerned with the writing of an arrangement (Section 5), ending with the PURPOSE OF AN ARRANGEMENT.
- 2) Chapter 20 is essentially designed to "put everything together" in the context of the conception of an arrangement. It is far too easy to academically apply the many points covered IN THE WRONG WAY. THE CONCEPTION OF THE CHART COMES FIRST! THE TECHNIQUES USED TO REALIZE THAT CONCEPT ARE A REACTION TO THE CONCEPT AND SHOULD ALWAYS BE THOUGHT OF IN THEIR PROPER ROLE.
- 3) The critical level a good arranger must therefore reach is to be able to relate the concept he hears and creates in his mind (as intuitively as possible) to the most effective procedures, sources and techniques THAT PRODUCE THE SOUNDS HE FIRST HEARS.
- 4) This chapter will deal with the LINKING TOGETHER OF CONCEPT and how to reproduce that concept on paper. Obviously, the student of arranging will get out of this most demanding awareness exactly the energy he puts in. You must be able to relate these factors I have mentioned to each other to be able to really "write music"!

#### GENERAL CONSIDERATIONS

- 5) There are some general considerations that have to do with transferring "sounds" to paper. We will now cover these areas.

#### WHAT'S IMPORTANT

- 6) Although we will go into detail later in Chapter 20, it is important to realize that any music we write makes either MELODY, ACCOMPANIMENT or RHYTHM the PRIME FACTOR AT ANY GIVEN POINT.
- 7) Therefore, the writer must be clear in his own mind, what he is really trying to effect. You can seldom have it two ways at the same time. Either the melodic factor is more important than the accompaniment and rhythmic factors or the rhythm factor is more important than the other two factors, etc.
- 8) You cannot make effective judgments, decisions and adjustments if you do not KNOW what is REALLY IMPORTANT.



### FORM

- 9) An important consideration that is always with us is the FORM or ORGANIZATION OF THEMATIC MATERIALS making up any composition that we are arranging. An awareness of FORM is basic for two reasons. If we are arranging a conventional, commercial or obvious arrangement, we need the discipline to conform to the composition's natural form.
- 10) However, in a freer, more jazz-oriented form, we may wish to purposefully DISTORT this original form. In this area, the addition of our own thematic material enables us to INVERT A NEW COMPOSITE FORM made up of phrases of the composition and phrases of our own. The resultant effect is a new form, dictated only by our own musical taste and intuition.

### CONVENTIONAL FORMS

- 11) Most standard compositions with lyrics have a basic 32 measure overall length, although there has been an increasing tendency to violate this fundamental approach in recent years, particularly in rock compositions.
- 12) A 64 measure DOUBLE METER version of the basic 32 measure form, and a 16 measure HALF-TIME version make up two of the most used variations.
- 13) We shall use the 32 measure length as an example, although any of the following examples could be doubled or cut in half, conforming with Paragraph 12 above.
- 14) In a 32 measure form we shall analyze a composition in 8 measure PHRASES.
- 15) The first 8 measure PHRASE will be labeled the "A" Phrase. Each subsequent phrase that IS DIFFERENT FROM THE "A" PHRASE will be called, first, the "B" Phrase, then the "C" Phrase, etc.
- 16) The standard 32 measure forms are:
 

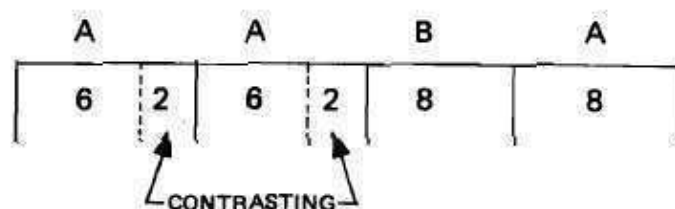
a)	"A"	"A"	"B"	"A"
b)	"A"	"B"	"A"	"C"
c)	"A"	"B"	"C"	"D"
d)	"A"	"A"	"B"	"C"
- 16a) Typical standard songs constructed with the above 32 measure forms would be:
 

16a)	<b>I'M IN THE MOOD FOR LOVE</b>
16b)	<b>GREEN DOLPHIN STREET</b>
16c)	<b>APRIL IN PARIS</b>
16d)	<b>WHAT IS THERE TO SAY</b>
- 17) It is necessary to consider a phrase to be contrasting if, although the melody remains the same, the harmonization is different, with the following exception:



- 18) Many of the older standards are the AABA form, with this difference. The last two measures of the first two "A" Phrases are different. This is usually written with a 1st Ending and 2nd Ending in fakebook and lead sheets.

Ex. #640

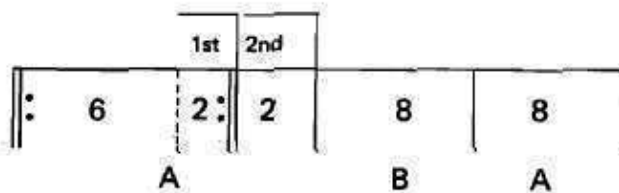


- 19) The point of using the 1st and 2nd Endings is to avoid writing the repeated six measures of the second "A" Phrase over again.

In most cases we would consider the two phrases both "A" Phrases, although the last two measures are different.

The actual presentation of this situation would look like this: (See Example 641, compare with Example 640.)

Ex. #641



- 20) Example 641 represents the method of indicating the repeated first six measures of the second "A" phrase. Example 640 would mean the same thing without the convenience of writing it a shorter way.

- 21) Many compositions will include extensions in the last 8 measure phrase. These are usually referred to as TAGS. The standard length of a tag is an additional four measures. However, they could be any length, from one measure to seven measures or more. If it should be extended to eight additional measures, we would then consider it another added eight measure phrase.

Ex. #642

A	B	A	C	Tag
8	8	8	8	4

- 22) As noted, many of the recent compositions, particularly in the rock style, have made use of odd measured phrases. In theory then, ANY NUMBER OF MEASURES, IN ANY METER, CAN MAKE UP THE FORM OF A COMPOSITION (See paragraph 26, page 358.)

We would still follow the same basic process in analyzing the thematic form of a composition (as outlined in Paragraph 15), with the difference that instead of a consistent eight measures to a phrase the number could be anything. It still becomes a matter of comparing CONTRASTING THEMATIC PHRASES and labeling them as the "A," "B," "C," "D" Phrases, etc.

- 23) Many of the older standard compositions included verses, which lyrically "set up" the actual chorus of a song.

These verses were usually eight to 16 measures in length, and, in some cases, particularly Broadway scores, would be as long as 32 measures.

- 24) Another very basic form is simply an "A" "B" form. Again, each phrase could be 8 or 16 measures in length. Many of the novelty type of popular songs use this form. Sometimes the "A" Phrase functions as a verse of a song and the "B" Phrase as the chorus. The lyrics are of a "story" nature and thus provide the form of the song, alternating from verse to chorus:

"A" "B", "A" "B", "A" "B", etc.

- 24a) Another basic form utilized in jazz, rock, country-western and folk styles is that of the conventional 12 measure BLUES FORM. The Blues form has the flexibility of being 24 measures (double meter), as well as in the 12/8, 48 measure variation. Application of the Blues in 5/4, 7/4 and 7/8 meters is also possible. For detailed information on specific harmonic Blues progressions and variations, refer to Volume III of my ENCYCLOPEDIA OF HARMONY AND THEORY APPLIES TO IMPROVISATION FOR ALL INSTRUMENTS.

- 25) A few of the standard compositions are of exceptional length, such as 48, 72 or even 108 measures. Some of the more varied compositions would be:

**GYPSY IN MY SOUL:**

"A" (8) "A" (8) "B" (8) "A" (8) "C" (8) "A" (8) = 48 measures

**I'LL REMEMBER APRIL:**

"A" (16) "B" (16) "A" (16) = 48 measures

**I WON'T DANCE:**

"A" (12) "B" (16) "C" (16) "D" (16) = 60 measures

**BEGIN THE BEGUINE:**

"A" (16) "B" (16) "C" (16) "D" (16) "E" (16) "F" (12) "G" (16) = 108 measures

**CHEEK TO CHEEK:**

"A" (16) "B" (16) "C" (16) "D" (16) "E" (16) = 72 measures

**LUCK BE A LADY:**

"A" (12) "B" (18) "C" (16) "D" (16) "E" (8) = 76 measures

- 26) Below are some examples of the FORM breakdown of some of the more contemporary compositions:

**SOMETHING:**

"A" (9) "A" (10) "B" (8) "A" (9) "A" (12) = 56 measures

**EVERYTHING'S ALRIGHT:**

"A" (14) "A" (14) "B" (14) "A" (14) "C" (6) "A" (14) Tag (2) = 88 measures

**UP, UP AND AWAY:**

"A" (16) "B" (8) "A" (16) "B" (8) "C" (16) "A" (16) "B" (8) = 88 measures

**YOU'VE MADE ME SO VERY HAPPY:**

"A" (6) "B" (10) "A" (6) "B" (10) "C" (8) "D" (6) "D" (6) = 52 measures

**THE FOOL ON THE HILL:**

"A" (8) "B" (8) "C" (10) "A" (8) "D" (14) "E" (14) Tag (4) = 74 measures

### NEW COMPOSITE FORMS

- 27) NEW COMPOSITE FORMS can be invented by using some variation or adoption of the following suggestions:
- a) INTRODUCTION – ANY LENGTH (arbitrary new thematic material);
  - b) ALTERNATING ORIGINAL PHRASES of thematic material WITH NEW THEMATIC MATERIALS;
  - c) ORIGINAL THEMATIC MATERIALS EXTENDED MELODICALLY AND RHYTHMICALLY BY MEANS OF FRAGMENTARY DEVELOPMENT;
  - d) INTERRUPTION OF FLOW OF ORIGINAL THEMATIC MATERIALS by means of added measures of drum breaks, original motifs, etc;
  - e) INTERPLAY BETWEEN UNRELATED THEMATIC MATERIALS and the original thematic materials;
  - f) FREE EXTENSIONS OF TURNAROUNDS into any arbitrary number of measures;
  - g) Use of INTERLUDES or new sections of any length, made up of thematic materials;
  - h) Extended tag endings of any length, made up of thematic materials previously used or new;
  - i) Counterpointal development utilizing original or new melodies with free rhythmic and metric variations;

In modal or stylistic types of original compositions, you can create your own form in relation to the EMOTIONAL CONTOUR of the overall chart. A background phrase, for example, of two, four or eight measures can be repeated any specified number of times, or repeated indefinitely, moving ON CUE from the director. At each repeated phrase, additional figures and sections are added, resulting in a gradual building of excitement and climactic effect. The first movement of Allyn Ferguson's THREE MOVEMENTS FOR TENOR SAX AND JAZZ BAND (RS AF204) is a prime example of the application of this technique. Countless variations can be used, tailored to individual situations.

- 28) As an illustration of free extension of turnarounds (27f), compare the following lead sheet of NIGHT SONG (Example 643) with the finished arrangement utilizing the extended turnaround. (See Example 644.)

Ex. #643

## NIGHT SONG

MODERATE BOSSA NOVA TEMPO

By DICK GROVE

The musical score for "Night Song" is written in 4/4 time with a key signature of three flats (B-flat, E-flat, A-flat). The tempo is marked "MODERATE BOSSA NOVA TEMPO". The score consists of ten staves of music, each with a specific chord progression indicated above the notes. The chords are as follows:

- Staff 1: Ebmi, D°7, Ebmi7/7
- Staff 2: Cmi7(b5), Cb9, Fmi7(b5), Bb+7(b9)
- Staff 3: Ebmi7 (triple), Ebmi7/7, C+7(b9) (triple)
- Staff 4: F+7(b9), Bbmi9, Bb+9
- Staff 5: Ebmi (triple), D°7, Ebmi7/7, Cmi7(b5) (triple)
- Staff 6: Cbma9(6), Bb+7, Ebmi (triple), Ebmi7/7
- Staff 7: Cmi7(b5) (triple), F7(b5), Gb7(b5), Gb7, Gb7(+11)
- Staff 8: Gmi7(b5), C7(b9), Cmi7(b5)/F, F7(b9)
- Staff 9: Fmi7(b5)/Bb, Bb13(b9), Ebmi7 (triple), Ebmi7/7 (triple)
- Staff 10: Cmi7(b5), F7(b9), Bb13(b9), Ebmi9, Ab/Eb, Ebmi9

- 29) The "A" section of NIGHT SONG is a 12 measure phrase, the 11th and 12th measures comprising the turnarounds. In the following Example 644, the concert sketch of the arrangement of NIGHT SONG starts at measure 9, continuing through measure 10 to where the turnaround starts at the downbeat of measure 11.
- 30) You will see in Example 644 that I have changed to 3/4 meter. The tempo relationship between the 4/4 and 3/4 time signatures is L'ISTESSO, meaning the pulse of the tempo remains the same. A half note in 4/4 time now equals a dotted half note or full measure in 3/4.
- 31) Starting at the downbeat of the turnaround, I have extended the turnaround using five measures of new thematic material in 3/4 plus two more measures in 4/4 at the original tempo.
- 32) The arrangement sketch (Example 644) therefore resumes (at measure 13 of the lead sheet) with the next phrase of the composition.

Ex. #644

SC

3rd Trpt. (Harmon)

Solo Flugelhorn

(27) (28) (29)

Solo

3

F F C

3

Ebm9 / / / Gb/C / / / F+7,9b, #

Cont. on Next Page

**D**  $\text{♩} = \text{♩}$  cups

3rd Trpt

cups (30) (31) (32)

Flts

Cls.

(Drs, Concerted)

Gtr. Bs.Cl.

(Drs, concerted)

Bass Tacet

$\text{♩} = \text{♩}$  Solo **E**

(33) (34) (35) (36) (37)

(Trbs, Open)

2 Flts, Miked

E $\flat$ mi9 / / / / /

+ Bass



- 33) All the suggestions of new composite forms listed previously should be studied and related to analyzation of scores (see Appendix). A complete awareness of Chapters 3, 4, 5 and 6 as well as this chapter is needed for a practical working understanding of this advanced concept.

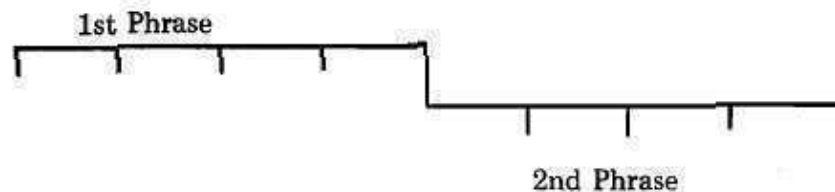
### MAKING AN ARRANGEMENT FLOW

- 34) One of the most dangerous obstacles to good writing is the fact that beginning writers have a tendency to approach one note of a chart at a time. This is largely due to inexperience and uncertainty about what to do, how will it sound, etc. The result of this is that the new writer seldom evaluates his writing from an overall perspective.
- 35) The first prerequisite for writing a flowing, logical cohesive chart is to deal with melody lines first. One huge advantage of the "sketching procedure" is that, in sketch form, you can easily lay out your lead line or top melody note. This enables you to make clear, uncluttered evaluations of your phrasing, articulation and rhythmic patterns. Judge your phrases by singing or playing IN TEMPO, reacting to YOUR OWN writing as if it were someone else. Be an intelligent and uncompromising critic. Develop the habit of working and polishing your lead line in four and/or eight measure phrases. DO NOT GO ON TILL YOU LIKE IT THE THIRD TIME YOU CHECK IT!

### FORESHADOWING

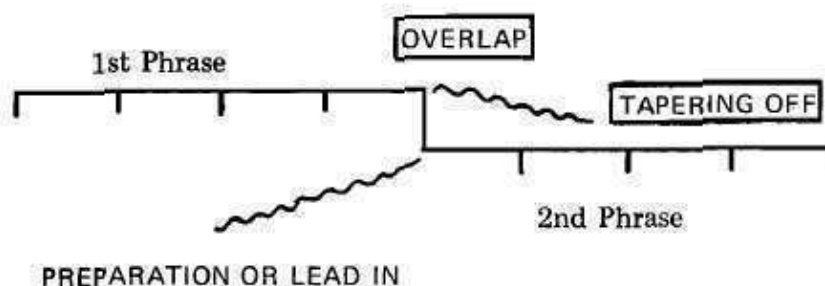
- 36) When you introduce a NEW ENTRANCE or write a melody line and add an accompaniment to that melody, you are dealing with two musical ideas. In most cases, one musical idea will not just stop, the second idea start.
- 37) Instead, a foreshadowing and overlapping will generally occur.
- 38) This means that before the first idea ends, the second will start, usually with a "leading in" or preparatory series of notes. When the second idea takes over, the first will not abruptly stop; instead, the last note will sustain (creating an overlap) or taper away with a series of notes. Example 645 illustrates this procedure in diagram form.
- 39) Example 645 shows an abrupt stop of the first musical statement after 4 measures and a sudden beginning of the second on the fifth measure. The result will generally be that of a choppy, unflowing transition from one to the other.

## Ex. #645



- 40) The overlap technique shown in Example 646 was explained in more detail in Basic Technique No. 3 and Example 419, Chapter 12.

## Ex. #646



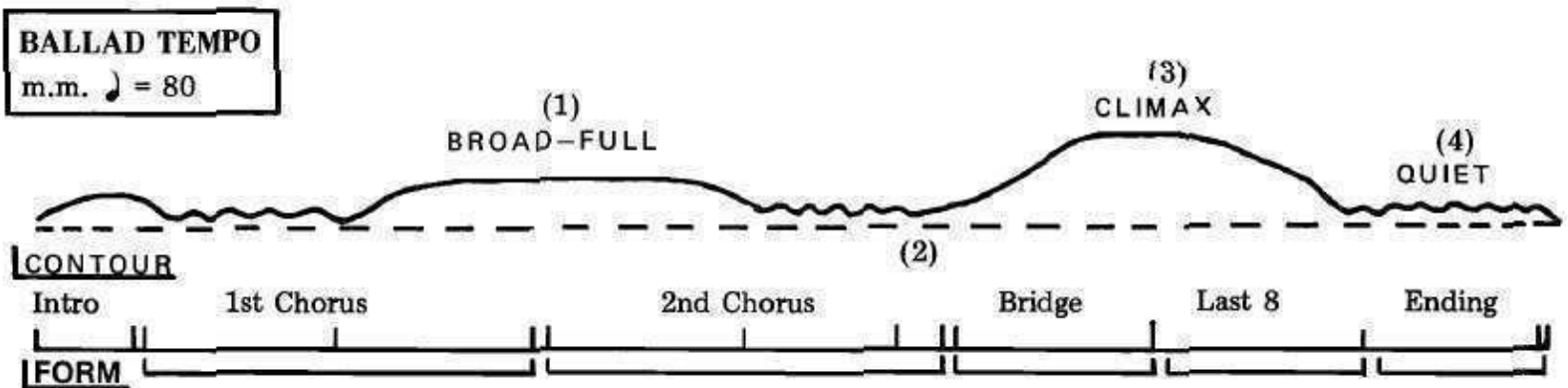
- 41) This example shows quite vividly the completed process of applying a lead in, overlap and tapering off of the first musical statement into the second. The specific instruments, voicings, etc., are beside the point. The effect or reaction when done correctly is very satisfying and musical. Always be on the lookout for any abrupt stopping or beginning ideas. You can have them, of course, but check and MAKE SURE it is really what you want.

### EMOTIONAL CONTOUR

- 42) Every musical idea we write has a resultant emotional effect. That emotional effect can range from "boring" to the peak of excitement. Too often a new writer writes down his musical ideas, THEN determines the effect. Obviously, to be in control, you should first KNOW what emotional effect you wish, then shape your musical idea to reflect this effect.
- 43) Emotional effects determine decisions having to do with:
- Span of orchestration;
  - Orchestral weight;
  - Directional shape of melody and accompaniment;
  - Rhythmic patterns;
  - The register you write in, and consequently, the orchestration for that register.

- 44) The total result of the numerous emotion effects used during a chart produce the **EMOTION CONTOUR** of the arrangement.
- 45) The point here is that any chart written has an **EMOTIONAL CONTOUR**, but if thought and feeling is not devoted to this area, you accept the resultant contour automatically, and it may be entirely wrong. The awareness of **CONTOUR** is what tells you to a great extent how and what to do.
- 46) An effective method to diagram the **EMOTIONAL CONTOUR** of a chart is to block out the form of the chart.

Ex. #647



- 47) This diagram of a ballad chart gives you the overall perspective that is so necessary. The important effects are indicated at:
- Point 1 — Broad, full effect for last half of first chorus and first half of second chorus, tapering down into the turnaround (point 2).
  - Starting at the turnaround, a gradually ascending, increasing span, density and weight leads to the peak (point 3), effecting the climactic peak of the chart.
  - This peak point then tapers down, with descending, decreasing span, density and weight.
  - The ending (point 4) is a very quiet, down feeling, creating a distinct contrast to the peak of 12 to 16 measures previously.

### COMPARATIVE LEVELS

- 48) One of the valuable by-products of scanning your EMOTIONAL CONTOUR is that with this overall perspective at your fingertips you automatically have a comparative point of view of all the basic factors: register, span, density, weight and melodic shape as well as rhythmic considerations.
- 49) In other words, point 1 in Example 647 will be a broad, full level of the basic factors. It will be proportionately MORE than just before point 2 and at point 4, and proportionately LESS than at point 3.


### DYNAMICS

- 50) The correct use of dynamics adds another dimension to your writing. The following Table 32 defines the different dynamic levels and markings.
- 51) Dynamic markings are too often considered second thoughts with the result that, in many instances, dynamics are omitted, incomplete or incorrect.
- 52) It is the arranger's responsibility to communicate to each player the comparative level on which he should play. This is most effectively done by STATING EVERY INSTRUMENT'S DYNAMIC LEVEL AT EACH NEW ENTRANCE AND AT EACH CHANGING DYNAMIC LEVEL DURING A PHRASE. The dynamic level has a direct relationship to REGISTER AND ORCHESTRAL WEIGHT.

TABLE 32

Standard Dynamic Levels		
<i>ppp</i>	- triple piano pianississimo	- very, very soft
<i>pp</i>	- double piano pianissimo	- very soft
<i>p</i>	- piano	- soft
<i>mp</i>	- mezzo piano	- half or moderately soft
<i>mf</i>	- mezzo forte	- half or moderately loud
<i>f</i>	- forte	- loud
<i>ff</i>	- double forte fortissimo	- very loud
<i>fff</i>	- triple forte fortississimo	- very, very loud

Special Effects		
<i>sfz</i> ( <i>sf</i> )	- sforzando	- loud, biting attack, sudden emphasis
<i>sf fz</i> ( <i>sf f</i> )	- sforzando	- very loud, biting attack, sudden emphasis
<i>sfp</i>	- sforzando-piano	- loud, biting attack to soft
<i>sfp</i> 	- sforzando, piano, crescendo	- loud biting attack, to soft, crescendoing to next marking

- 53) Critical stylized voicings such as closed 4th, 5th clusters and diatonic clusters are delicate tonal relationships. They automatically depend a great deal upon a dynamic level that insures proper balance and realistic relationship to register.
- 54) A few hints regarding the correct usage of dynamics are as follows:
- Indicate the dynamic marking at the point where the instrument plays, NOT DURING A REST. This is confusing, as it is obviously not possible to play loud or soft WHEN YOU AREN'T PLAYING;
  - Modulating levels of dynamics (see Example 648) should always be sung to check out their feasibility relative to tempo.
  - Rhythm section instruments, particularly drums, should be marked with corresponding levels matching brass, ensemble, woodwind and sax dynamics.

## Ex. #648

TEMPO INDICATIONS

- 55) Always indicate the specific tempo marking at the beginning of a chart or descriptive indication, such as SLOW BLUES, MODERATE BOSSA NOVA, FAST AS POSSIBLE, etc.
- 56) If tempos change DURING a chart it is expedient to change to tempos BASED ON THE SAME PULSE. This was brought out in the previous Example 644 of NIGHT SONG.
- 57) Twice as fast (double tempo), twice as slow (half tempo) are all practical and because they are such natural changes will usually handle the majority of situations.
- 58) Going from 4/4 to 6/8 to cut time can be all L'ISTESSO RELATIONSHIPS:

Ex. #649a       $\frac{4}{4} \quad (\text{♩} = \text{♩.}) \quad \frac{6}{8}$

Ex. #649b       $\frac{6}{8} \quad (\text{♩} = \text{♩}) \quad \text{♩}$

- 59) Rubato (or free tempo) should be in 4/4 or  $\frac{3}{4}$ , depending on the general speed. The rhythm patterns in a rubato section MUST REFLECT THE TIME SIGNATURE.
- 60) Generally, SYNCOPATED AND EXTREMELY SUB-DIVIDED RHYTHM PATTERNS HAVE NO PLACE IN A RUBATO TEMPO. If you think they do, reconsider what you are REALLY trying to effect.
- 61) It is possible to have a strict tempo (allowing the syncopation and fast sub-divisions) WITHOUT THE RHYTHM SECTION PLAYING A STEADY PLUS, OR EVEN PLAYING.

TABLE 33

CHANGING TEMPOS

**RALLENTANDO (RALL.)** — Growing slower and slower:

Application: Usually used in shorter spans (2 to 4 beats) with greater climactic or peak points. Should be conducted.

**RITARD (RIT.)** — Delaying of time, gradually.

Application: Usually used over longer spans than RALLENTANDO. RITARD can, therefore, be a gradual slowing down, sometimes involving up to eight measures.

**ACCELERANDO (ACCEL)** — Gradually growing faster and faster:

This effect can be quite difficult to bring off in normal stage band/jazz ensemble situations. It requires great individual feel by all players and should be seriously evaluated before using. If used, the particular rhythmic patterns involved have much to do with its practicability. Concerted rhythm patterns are recommended.

- 62) **ALL TEMPO INDICATIONS ARE OF PRIME IMPORTANCE.** The key to any successful performance is tempo. It must be natural, reflecting the rhythmic patterns and mood of the arrangement. Do not ASSUME the tempo in a vague way. (Review Chapter 3.)



### MORE THOUGHTS ON VOICELEADING

- 63) Although I have discussed some ramifications of voiceleading in Chapter 7, I will now summarize some general considerations in this area.
- 64) A distinct commitment occurs each time you determine a level of orchestral weight and changing levels of density.
- 65) This commitment arises when deciding how many individual voices you will distribute among the levels of density and weight. OBVIOUSLY, THE GREATEST NUMBER OF INSTRUMENTS INVOLVED AT EVEN ONE POINT IN A PASSAGE DICTATES THE NUMBER OF INSTRUMENTS TO USE FOR THE ENTIRE PHRASE. DO NOT MAKE THE MISTAKE of starting with too few instruments then ADDING THOSE NEEDED INSTRUMENTS TO COMPLETE ISOLATED VERTICAL VOICINGS.
- 66) Instead, by intelligent doublings of existing notes, those extra instruments required in those isolated spots will be available.

### LOGICAL PHRASES

- 67) The result of these conclusions is that all instruments involved have LOGICAL PHRASES.
- 68) This means each individual player, reading his own part, has the opportunity to realize his own contribution to the overall group of instruments, enabling him to more effectively blend and phrase with the others.
- 69) This is precisely the type of lesser known ingredient that produces well written, natural, easy-to-play charts. Again, this is the arranger's responsibility.
- 70) As an example of this ingredient, review Example 549. Note the entrance of new instruments at measures 113, 118 and 120. These occur at logical phrases in the 16 measure passage.
- 71) Although the opening measure (105) is in octaves, five instruments are doubled on the two octaves, making available instruments at points of four part density (measures 106, 109).
- 72) Added orchestral weight is introduced at measure 113, increasing the building EMOTIONAL CONTOUR as the section continues.
- 73) The addition of woodwinds at measure 118 increases the span of orchestration (another register).

- 74) The final entrance of the 4th trumpet prepares the following ensemble passages.
- 75) Each application of LOGICAL PHRASE will be a different situation, dependent on the specific requirements at that point. Consequently, your comprehension of the PRINCIPLE OF LOGICAL PHRASES is necessary in order to adapt to your own decisions when you write.

### CROSSING VOICES

- 76) In an attempt to further the goal of writing easy-to-play, natural inner harmony parts, it will often be necessary to cross voices to eliminate REPEATED HARMONY NOTES.
- 77) These situations usually occur between:
- 2nd and 3rd trumpets
  - 3rd and 4th trumpets
  - 2nd, 3rd and 4th trumpets
  - 3rd, 4th and 5th trumpets
  - 1st and 2nd tenor saxes
  - 2nd and 3rd trombones
  - 3rd and 4th trombones
  - 2nd, 3rd and 4th trombones
  - 3rd, 4th and 5th trombones
  
  - 2nd and 3rd flutes
  - 3rd and 4th flutes
  - 2nd, 3rd and 4th flutes
  - 3rd and 4th clarinets
  - 4th and 5th clarinets
  - 3rd, 4th and 5th clarinets
- 78) Paragraph 20, Page 128, in Chapter 7 illustrates a solution to this problem involving the sax section.
- 79) This problem again brings out another advantage of using a sketch. Awareness of REPEATED INNER HARMONY NOTES is obvious in sketch form. By indicating an X on the sketch, the crossing of voices can be executed when the voices in the sketch are extracted and written in the score.

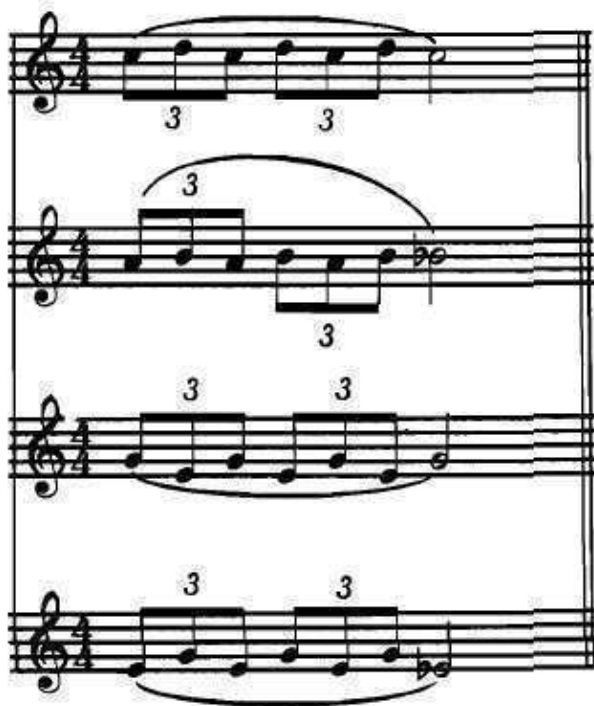
- 80) Example 650 illustrates a typical problem in voiceleading for four trumpets, saxes or woodwinds. The 3rd and 4th voices have repeated notes in the first two beats of the example. To enable these voices to move as the first two voices are moving, the X's indicate WHERE the crossing needs to occur.

Ex. #650



- 81) In this case the need to cross continues through the first six notes of the measure.
- 82) Example 651 shows (in concert) the complete cross voicings of the 3rd and 4th instruments.

Ex. #651



**BASIC TECHNIQUE NO. 16****FREE LEAD**

- 83) **FREE LEAD**, as briefly illustrated in Chapter 7, Paragraph 28, Page 130, Example 341, employs a rhythmically contrasting melody line against the remaining instruments playing a different concerted rhythm.
- 84) This technique provides relief from constant concerted voicings and creates the effect of freeing or loosening the ensemble.
- 85) It is extremely valuable in dealing with rhythmically busy melodies, providing an alternate handling of the ensemble voicing.
- 86) **FREE LEAD** is therefore predicated on:
  - a) Unison or solo orchestration of the rhythm of the melody;

**AGAINST**

- b) Concerted, harmonized voicings of the remaining ensemble, **RHYTHMICALLY BASED ON THE RHYTHM OF THE CHORD CHANGES**.
- 87) Most chord changes (dependent on tempo) move on downbeats, or secondary beats of the measure. These secondary beats would involve the
  - 3rd beat of 4/4 or C time;
  - 4th beat of 6/8 time;
  - 3rd or 4th beats of 5/4 or 5/8 time;
  - 4th or 5th beats of 7/4 or 7/8 time;
  - upbeat of the 2nd beat of 3/4 time.

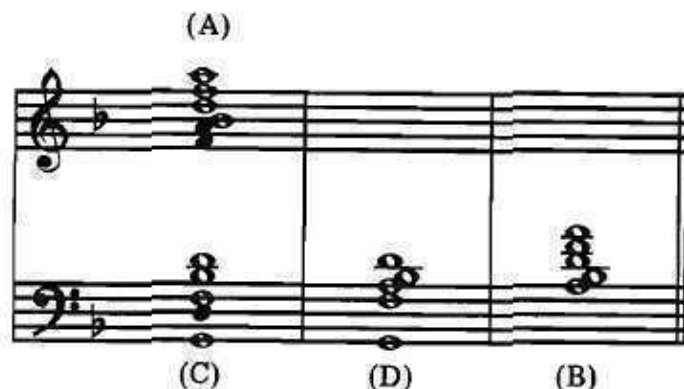
**BRASS SECTION CHARACTERISTICS**

- 88) The brass, as a section, normally function in a concerted rhythmical fashion. There are variations, such as using three out of five trumpets with perhaps two out of four trombones. However, the five brass being used would still function rhythmically together or concerted.
- 89) Brass can be divided and split:
  - a) Unison trumpets (free lead) against harmonized, rhythmically contrasting trombones.
  - b) Two or three trumpets rhythmically contrasting to the remaining trumpets concerted with the trombone section.
  - c) Bass trombone or bottom two trombones on a rhythmically contrasting bass line (as a solo free lead) from the remaining brass. When the brass function as a section or in an ensemble, think of them as "one man" rhythmically.

LARGE BRASS SECTIONS

- 90) Voicings utilizing large brass sections of up to six trumpets and five trombones can be handled:

Ex. #652



- 91) The black note heads represent the 5th and 6th trumpets. A normal solution, as illustrated above, is to double the lead trumpet an octave lower with the 5th trumpet and double the 2nd trumpet an octave lower with the 6th trumpet. (See Point A, Example 652.)
- 92) This technique is practical because the trumpet section is predicated from the lead trumpet melody, so the 5th and 6th trumpets can be thought of as a form of MELODIC COUPLINGS.
- 93) This same principle would hold true if the trombone section were to function as a soli, the lead trombone thereby playing the lead melody. In this case, a 5th trombone would double the lead trombone an octave lower. (See Point B, Example 652.)
- 94) When five trombones are voiced as a concerted brass section under the trumpet lead and section, open four or five part voicings work very well.
- 95) Point C, Example 652 illustrates four part density with five trombones, the 4th trombone (black notehead) doubling the lead trombone an octave lower.
- 96) Point D shows five part density in the trombones, in open position.
- 97) Both Points C and D are possible trombone voicings to complement the trumpets in Point A. Point B applies to a trombone soli.

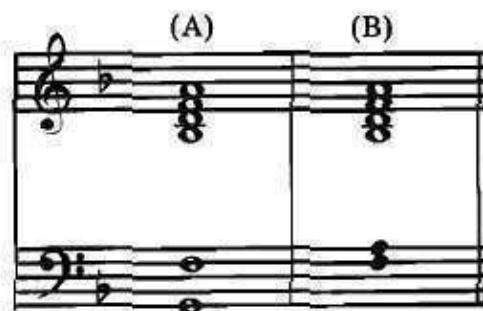
### ADDED FRENCH HORNS, MELLOPHONES

- 98) An added section of French horns or mellophones can most effectively be voiced and added to the remaining brass section in the same way that the 5th and 6th trumpets were added, doubling the 1st and 2nd trumpets. (See Point A, Example 652.)

### LARGE SAXOPHONE SECTIONS

- 99) Sax sections comprising a combination of six saxes can be voiced in these ways:

Ex. #653



- 100) Six part open voicings for slower moving or sustained background or melodic passages work very effectively. (See Point A, Example 653.)
- 101) Point B in Example 653 illustrates a block voicing with the top two voices doubled an octave lower, similar to the approach to six trumpets (Point A, Example 652).

### LARGE RHYTHM SECTIONS

- 102) Many contemporary jazz/rock rhythm sections will utilize two guitars, keyboard or drums as well as multi-percussion players.

### GUITARS

- 103) Additional guitars are most effectively assigned different functions. The electric guitar part plays *single note solis* with horns and accented rhythmic figures.
- 104) The role of the second guitar is that of rhythm. **THIS IS A MORE CONSTANT PART** closely associated with the basic rhythm instruments, drums and bass.

### DRUMS

- 105) On some occasions, combined bands will work with two sit-down drummers. This can bring about disastrous results if both do not have the same time concept.
- 106) If it cannot be avoided, the next best approach is to think of the strongest drummer as *the more constant and "out front."* The weaker drummer is assigned a more supplemental role without the responsibility of critical tempo changes, fills, solos, etc.

**KEY BOARDS**

- 107) Two keyboard players is a luxury. Obviously, this allows the arranger the option of additional orchestral colors and should present few problems within the scope of available keyboard instruments.

**PERCUSSION**

- 108) Additional percussion players may change your scoring and orchestration approach. Instead of dividing the same basic percussion part up between various instruments, you are now allowed the latitude of a separate part per player.
- 109) In this circumstance, avoid switching the first player to an instrument the second player has been playing.
- 110) Reference Score PE 915, MOON ROCKS, is a good example of possibilities that can be used with three separate parts.

**THE PRIMARY FACTORS**

- 111) Paragraphs 1 through 8 of this chapter emphasized the importance of CONCEPT and its relationship to the many subjects covered in this book. CONCEPT then means the IDEA, effect and emotional contour that gives an arrangement character and purpose.
- 112) Breaking this down further, we are really dealing with possible treatments, emphasizing either the MELODIC, ACCOMPANIMENT OR RHYTHMIC factors that make up our music. This breakdown therefore gives us the PRIMARY FACTORS.
- 113) The following Tables 34, 35, 36 and 37 are the summarization and tying together of all the individual techniques and approaches from the point of view of their contribution to and participation in the primary factors.
- 114) Each table presents a group of considerations relative to the FACTOR covered in that table. Each individual point, within an aspect, is numbered for easy reference.
- 115) Use the Index in the front of the book to find specific reference sources for review.



TABLE 34

## TREATMENT OF MELODY AS THE PRIMARY FACTOR

Musical Style Is Reflected By These Factors:	
Phrasing — (1) (Rhythm)	Articulation — (2)
Meter — (3)	Emotional Contour — (4)
Use of Cliche Patterns — (5)	Orchestration — (6)
Density, Weight and Span of Orchestration — (7)	

General Melodic Effect is Produced by These Descriptive Factors and Moods:
MELODIC CHARACTERISTICS:
Directional — (8)
Repetitious — (9)
Climactic — (10)
Contrasting — (11)
Emotional Contour — (12)
MOODS:
Pretty — (13)
Delicate — (14)
Sad — (15)
Cute — (16)
Happy — (17)
Mysterious — (18)
Moving — (19)
Static — (20)
Hard (Driving) — (21)
Exciting — (22)
Chaotic — (23)
Overwhelming — (24)

Melody Can Be Treated By Use of 1 to 8 Levels of Density, Applied By Use Of:
Up to six octaves span of orchestration — (25)
Any level of available instrumental weight — (26)
TREATMENT OF HARMONIZED MELODY:
Concerted — (27)
Free Lead — (28)
Overlap — Foreshadowing — (29)
Melodic Couplings — (30)
EFFECT OF DENSITY APPLIED TO HARMO- NIZED MELODY CAN BE SPECIFICALLY STYLIZED BY THE USE OF:
Melodic Couplings — (31)
Triads — (32)
4ths — (33)
Block, "A," "B" — (34)
Open Voicings — (35)
5th Clusters — (36)
Diatonic Clusters — (37)
Plural Chord Relationships — (38)

TABLE 35

TREATMENT OF MELODY AS THE PRIMARY FACTOR	
Melodies Can Be Derived From These Sources:	
IMPROVISED SOLOS	USE OF ORIGINAL THEMATIC MATERIAL:
USE OF THEMATIC MATERIAL FROM THE COMPOSITION, PRODUCING THE EFFECT OF:	
Obvious Stylistic Treatment — (39)	for Free Areas — (40)
CHANGE TO ANY STYLE CAN BE MANIPULATED BY THE USE OF:	
Different Phrasing — (41)	for Free Areas — (42)
Different Articulation — (43)	for Free Areas — (44)
Different Tempo — (45)	
Different Meter — (46)	
A MORE STYLISTIC JAZZ OR MODERN APPROACH CAN BE EFFECTED BY THESE TECHNIQUES:	
Fragmentary Melodic Development of Original Thematic Sources — (47) COMBINED WITH →	New Thematic Materials — (48)
Restricted Use of Original — (49) Thematic Sources, COMBINED WITH →	New Thematic Materials — (50)
Intervallic Variation — (51)	
Interruption of Flow of Original Thematic Material — (52)	
Use of Original Thematic Material — (53) ALTERNATED WITH →	New Thematic Materials — (54)
Counterpunctal Development — (55) COMBINED WITH →	New Thematic Materials — (56)
EFFECT OF MELODY CAN BE INFLUENCED BY:	
Chromatic Use of Triads, 4ths or — (57) Parallel Structures as Melodic Couplings, Optionally COMBINED WITH →	New Thematic — (58)
Reharmonization — Optionally — (59) COMBINED WITH →	Materials — (60)
DIATONIC CLUSTERS — (61)	

TABLE 36

TREATMENT OF ACCOMPANIMENT AS THE PRIMARY FACTOR	
<b>The Musical Style of The Accompaniment is Determined By:</b>	
Phrasing (Rhythm) — (62)	Articulation — (63)
Meter — (64)	Emotional Contour — (65)
Counter Rhythms — (66)	Orchestration — (67)
Density, Weight and Span of Orchestration — (68)	
<b>Accompaniment Can Be Treated By Use of 1 to 8 Levels of Density, Applied By The Use Of:</b>	
Up to Six Octaves Span of Orchestration — (79)	
Any level of available instrumental weight — (80)	
<b>TREATMENT OF HARMONIZED ACCOMPANIMENT:</b>	
Concerted — (81)	Free Lead — (82)
Sustained Pad — (83)	
Rhythmic Attacks — (84)	
<b>EFFECT OF DENSITY APPLIED TO HARMONIZED MELODY CAN BE SPECIFICALLY STYLIZED BY THE USE OF:</b>	
Triads — (85)	4ths — (86)
Block, "A", "B" — (87)	Diatonic Clusters — (88)
Open Voicings — (89)	
5th Clusters — (90)	
Plural Chord Relationships — (91)	

<b>The Effect of the Accompaniment Can Be Produced By The Use Of:</b>	
Punching, Rhythmical Attacks — (69)	
Sustained Harmonic Pads — (70)	
Counterpantal (Linear) Melodies — (71)	
Sequential Continuity — (72)	
(Sustained) Commontone — (73)	
Direction (Contour or Shape) — (74)	
Cohesion and Flow; Use of Overlap and Foreshadowing — (75)	
Fills — (76)	Climaxes — (77)
Repetition — (78)	

<b>Accompaniment Can Be Derived From New or Original Thematic Material From The Composition, Produced By The Following Techniques:</b>	
Rhythmic — (92)	Sustained — (93)
Pedal — (94)	Ostinato — (95)
Fills (Answers)—(96)	Overlaps — (97)
Fragmentary Development — (98)	
Counter melodies (1, 2, 3 or more voices) — (99)	
Counterpantal (Linear) Development — (100)	

TABLE 37

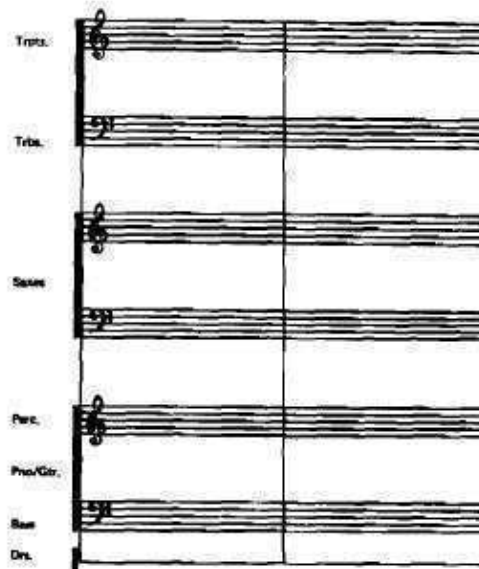
TREATMENT OF RHYTHM AS THE PRIMARY FACTOR	
Musical Style Is Determined By Emphasis On These Factors:	
Rhythmic Patterns — (101)	
Meter — (102)	Accents — (103)
Drum, Guitar, Bass and Piano Styles and Concepts — (104)	
AND BY THE TYPE AND ADJUSTMENTS MADE TO DRUMS, GUITARS AND BASS — (105)	
Rhythmic Emphasis Can Also Utilize 1 to 8 Levels of Density Applied By The Use Of:	
Up to Six Octaves Span of Orchestration — (114)	
Any level of Available Instrument Weight — (115)	
TREATMENT OF HARMONIZED RHYTHMIC PASSAGES:	
Concerted — (116)	
Cross Rhythms — (117)	
EFFECT OF DENSITY APPLIED TO HARMONIZED RHYTHMIC PASSAGES CAN BE SPECIFICALLY STYLIZED BY THE USE OF:	
Triads — (118)	
4ths — (119)	
Block, "A", "B" — (120)	
Open Voicings — (121)	
5th Clusters — (122)	
Diatonic Clusters — (123)	
Plural Chord Relationships — (124)	
Rhythmic Responsibilities, Functions and Effects	
RHYTHM SECTION	
Foundation of Band — (106)	
Support of Horn Figures — (107)	
Background to Solos, Vocals — (108)	
Solos — (109)	Half/Double Meter — (110)
Contrasting Rhythmic Activity — (111)	
SINGLE NOTE INSTRUMENTS	
Fast sub-divided Rhythmic Patterns — (112)	
Cross Rhythms — (113)	
Specific Rhythmic Effects are Produced By These Characteristic Functions:	
Rhythmic Breaks — (125)	
Double Time Rhythmic Patterns — (126)	
Cross Patterns — (127)	
Supportive Rhythmic Attacks — (128)	

## SECTION V — WRITING THE ARRANGEMENT

### Chapter 21: A Working Procedure

- 1) This book is intended to not only define the components making up the art of arranging, but to propose a realistic working routine. By this I mean an approach that will give you the maximum opportunity to stay on top of the many considerations you must keep in mind.
- 2) Starting with a concert sketch is the most effective working approach. As I have mentioned in previous chapters, the built-in advantages are:
  - a) Enables you to deal with melody, phrasing, articulation, contour, and form in their simplest state;
  - b) Allows you to judge your basic layout from an overall perspective;
  - c) Changes, alterations and additions are easier to make on the sketch rather than the transposed score;
  - d) Enables you to grasp voicings (in concert) at a glance; manipulate mixed voicings; TO SEE plural chord relationships;
  - e) Built-in check against accidentally leaving out measures, phrases, key changes, accidentals, etc.;
  - f) Speeds up your overall writing capabilities. Experience and practice enable you to devise shortcuts, eliminating needless writing out of repetitive situations.
- 3) Sketching can be done on 2, 3, 4, 5, 6 to 8 stave systems. The most practical is the 4 to 6 stave systems of four measures to a line.
- 4) A 6 stave system would distribute two lines each to brass and saxes (or woodwinds) with the remaining two lines devoted to the rhythm section and percussion. (See Example 654.)
- 5) Piano and guitar chord symbols can be written in the space between the bottom 2 staves. Stave 5 can be used for written notes for piano, guitar or percussion.
- 6) Drum indications can be written on a line drawn below stave 6, the completed drum part written when the sketch is transferred to the transposed score.
- 7) A 4 stave system is also very practical if you condense rhythm section parts to reminders and cues. I prefer this myself, actually completing all the rhythm parts when I write the score.
- 8) Percussion parts can be cued. For example, vibes doubling lead trumpet can be cued by the trumpet part.
- 9) Examine any of the concert sketches in Chapter 18 for numerous handlings of 4 and 6 stave concert sketches.
- 10) Many arrangers prefer a partial sketch on 1 or 2 staves, actually only sketching lead melodies, new entrances, background line lead parts and rhythmic breaks.
- 11) This approach is quite suitable if you have considerable experience and facility with voicings and transposition. With this approach, the sketch is actually reminding you of your original ideas; the specific voicings are then detailed without writing them out. Determining the specific voicing is done in your head or at the piano, then transposed onto the score.

## Ex. #654

GENERAL HINTS

- 12) Be as neat as possible.
- 13) Repeat accidentals EVERYWHERE within each measure.
- 14) Write articulation and phrasing indications ABOVE top melody line.
- 15) Draw double bars to indicate each phrase of composition (usually eight measures, etc.)

FROM SKETCH TO SCORE

- 16) When filling in the key signature at the beginning of the score and at the change of keys, it is not necessary to write the signature over and over for each staff. (See Example 655, Point A.) The method shown in Example 655 is quite acceptable and faster.
- 17) A variation of this is shown at Point A1. When a series of adjacent staves in the same key is used (for example, the rhythm section) the top and bottom key signature with a line through the in-between staves is sufficient.
- 18) Time signatures may be stated at the top and bottom, or top, middle and bottom of the score page. (See Point B.) The style used in this example is very efficient as the numbers are large enough to see at a glance. The double bar reminds the copyist to add the signature on all parts.
- 19) This same approach would be used for change of time signature DURING the chart, even if it changed each measure.
- 20) Change of key should be stated by a cancellation of the old, and statement of the new, with a double bar. (See Point C.) This same style is used here.
- 21) When a change of key or time signature occurs at the END OF a SCORE PAGE, it is stated on both the end of the first page and beginning of the second.



## INSTRUMENT INSTRUCTIONS

Ex. #655

Ex. #655

1 Alto

2 Alto

1 Ten. Saxophones

2 Ten. Saxophones

Baritone

Trumpets

Trombones

Perc.

Drums (BKS)

E.L. Guitar

Piano

S.C. Bass



- 22) Instrument names (if not printed on score paper) should be clearly indicated at the beginning of the score, as shown in Example 655. Succeeding pages should include at least abbreviations for easy reference.
- 23) Instructions concerning drum sticks, brushes, type of guitar and bass should be stated at the beginning.
- 24) Go through entire chart, following your sketch. Fill in measure and page numbers, double bars where needed, change of key and time signatures.
- 25) Your sketch is your guide in setting up the score. This phase also serves to double-check these points and eliminates mistakes.

### SHORT CUTS IN SCORING

- 26) When an instrument part is the same as the stave above, the lower one does not have to be rewritten. The indication COL and an arrow pointing to the stave above defines this situation; a wavy line indicates the length this is to be continued. (See Point D.)
- 27) Point D1 illustrates how this procedure can be continued through an entire section of instruments when the conditions apply.
- 28) Point D2 shows another variation. The indication COL plus the name of a specific instrument means for the copyist to go to the indicated stave and copy that line. They do not have to be adjacent staves.
- 29) Point E is still another variation. This refers the copyist to the first alto stave, but his notes are then copied an octave lower. The instruction COL 1st alto vb defines this.
- 30) Depending on the situation, the instruction could read 8va, 8vb, 15va, or 15vb. (See Chapter 2.)
- 31) Point F refers to the use of a COMA SOPRA. The circled measure number means whatever was originally written in that measure is recopied in the new measure. In this specific case, the use of the COMA SOPRA has the alternate possibility of a measure repeat sign (as used in the second measure of the guitar part), because they are adjacent measures.
- 32) COMA SOPRAS should not be used for less than a measure (see Point G). However, they may skip around through an arrangement.
- 33) Two general hints concerning the use of COMA SOPRAS:
  - a) Do not jump around all through the chart with isolated one measure COMA SOPRAS. However, it makes practical sense to use at least two to four measures in a row.
  - b) Write the lead instrument part out; then start the COMA SOPRA on the second part. (See Point G.)

- 34) When an entire section is tacit, indicate as shown at Point H, or some similar marking like a slash. This tells a copyist that the measure is SUPPOSED to be tacit and not just an oversight.
- 35) Point I illustrates a situation with three beats tacit. Here each part has the proper rests.
- 36) Point J is a shortcut, meaning the same as in Point I.

### DYNAMIC MARKINGS

- 37) Dynamics should be correctly indicated FOR EACH PART. Point K shows a series of markings. Note this is carried out throughout the brass and rhythm. The saxes incorrectly do not have the CRESCENDO.

### PHRASE, PLAYING AND ARTICULATION MARKINGS

- 38) Point L shows a combination of a phrase markings, gliss and long accent. Note this is carried throughout the section. In general, these types of markings should be repeated over each instrument line involved.

### NUMBERING

- 39) Pages and individual measures should be numbered. The pages at the upper right-hand corner, measures at least once in the same place on the score. (See Point M.) Larger score paper should have measure numbers at a convenient spot at both the top and bottom of each page for easy reference.

### MORE GENERAL HINTS

- 40) I again stress neatness when scoring. Be accurate in lining up concerted rhythmic patterns.
- 41) Rehearsal letters can be used each 8, 16 or obvious phrase point. The value in rehearsal letters is to simplify starting points during the stop and go of a rehearsal. Use your own judgment in choosing intelligent places.
- 42) Try to start phrases with rehearsal letters at the first measure of a score page. If you have to skip measures of the preceding score page to manage this, do so. The accepted method, for example, of skipping two measures, would be to draw a double bar at the end of the second measure (or sixth measure of 8 bar score paper). Draw a large VS, circle it, and draw an obvious uneven line down the page.
- 43) This indication (VS) means TO NEXT PAGE and is quite commonly used.

SUPPLIES

- 44) Both onion skin (ozalid) paper for easy reproduction, and regular manuscript score paper are available.
- 45) Four and eight measure score paper is available depending on your own preference.

CHECKLIST

- 46) The following section can be utilized as a basic checklist to help beginning or inexperienced writers organize a working procedure:
- 47) Determine ASSIGNMENT:
  - a) Specific INSTRUMENTATION;
  - b) Specific DOUBLINGS/possible OPTIONAL INSTRUMENTS;
- 48) DETERMINE PURPOSE OF CHART:
  - a) Translate the PURPOSE into specific requirements.
- 49) FAMILIARIZE YOURSELF with the composition.
- 50) Determine basic concept in terms of STYLE, METER, TEMPO AND SOUND.
- 51) Check style of chart against arranging styles (Chapter 22).
- 52) Determine orchestral choices (i.e., woodwinds or saxes, type of rhythm instruments and their adjustments). Choose percussion.
- 53) Project approximate LENGTH OF CHART and BASIC FORM.
- 54) Make notes of specific requirements needed.
- 55) If vocal, pick key for vocal. Determine, if an instrumental section is included, what key and where modulations will occur.
- 56) If instrumental, determine key, relative to style, range of composition, instrumentation, mood and overall effect.
- 57) Manipulate basic harmonies of lead sheet:
  - a) Make sure chord forms and choices are characteristic of styles and mood.
- 58) Lay out sketch, indicating basic form; introduction (if any), length of chorus, extensions of original form, possible interlude, etc.

- 59) Get into the tune, sing or play in tempo you have specified. Play with it, get ideas and sketch them separately. Begin to get a fix on your approach to the chart.
- 60) Determine general feel of chart in terms of density, voicing styles (conventional or advanced) emotional contour, etc.
- 61) Make diagram of EMOTIONAL CONTOUR, determining peaks, climaxes, solo portions, written sections.
- 62) Add chord symbols to sketch ---- to the end ---- play them if possible.
- 63) Start sketching single note melodic lines. Indicate on proper staff of sketch if you have specific lead instrument in mind (1st trumpet; 1st flute; lead alto, etc.). Be conscious of melodic fragmentary development, etc.
- 64) Review by singing or playing in tempo each 4 or 8 measure section of your lead melody lines, in terms of tempo, style, etc. Write in articulation, markings, phrasings.
- 65) Finish out single note melody for complete chart.
- 66) Determine passing chord approaches, write in chord symbols for passing chords.
- 67) Re-evaluate complete chart for flow, emotional contour, written and improvised sections in proportion to tempo and length of chart. Adjust where needed.
- 68) Determine approximate density and orchestral weight at all points possible.
- 69) Decide on TREATMENT, specifying whether your ideas are emphasizing melody, accompaniment or rhythm.
- 70) Translate these decisions into specific techniques and procedures to follow. Make notes on sketch to this effect.
- 71) Block out and compose melodic, harmonic and rhythmic materials in free areas.
- 72) Decide where improvised sections will have background passages
- 73) Start at beginning, determining your specific voicings (always re-evaluating your ideas in relationship to your original objectives.
- 74) As you get involved with voicings and treatments, relate them to tables and basic techniques. Give yourself the backup of these sources as a check and as a choice of ideas to help you finalize your sketch.

- 75) At various stages, check yourself on:
  - a) Flow of arrangement;
  - b) Foreshadowing, overlaps;
  - c) Voiceleading;
  - d) Cross voices;
  - e) Root of chord in melody;
  - f) Hidden minor 9th intervals —between ALL sections;
  - g) Half step intervals between melody and second voice;
  - h) Use of altered chord tones (make sure they are consistent throughout all sections, including rhythm);
  - i) Rhythmic relationship between melody and accompaniment.
- 76) Be conscious of density, weight and span of orchestration, relative to emotional contour, effect and instrumentation. Again check orchestral weight and its validity with density.
- 77) Complete sketch to the fullest extent you can. If you are working with only two or four stave paper, determine the critical points where the rhythm section parts need definition.
- 78) Sing and/or play through completed sketch, IN TEMPO. Be as objective as possible, making adjustments where you now think necessary. In particular, judge your sketch in terms of whether the desired FEELING and/or EMOTIONAL IMPACT comes off the way you conceived it.
- 79) **DON'T FALL IN LOVE WITH WHAT YOU WRITE!** Any and all notes are subject to second thoughts and adjustments. If a certain passage or phrase doesn't make it, start over and redo that phrase completely. The real test of the conception of a chart is if the original PURPOSE of the chart comes off musically.
- 80) Detailed voicings and interior voiceleadings are secondary to the melodic and rhythmic flow of the chart.
- 81) After you are satisfied with the sketch, lay out the score paper. Make sure the score paper you are using fits the instrumentation fairly closely.
- 82) Lay out your score, writing in measure and page numbers, signatures and instrumentation. (See first part of this chapter.) Use the sketch as a guide, drawing double bars at logical phrase points.
- 83) If writing a vocal chart, cue in the VOCAL LEAD line on the vocal stave. Lyrics do not have to be included, although it is sometimes helpful to include the lyrics at the beginning of a phrase. It is also helpful to include lyrics at RUBATO, RITARD and RALLENTANDO SECTIONS.

### EXTRACTING PARTS FROM THE SKETCH

- 84) Most arrangers complete the transposed score one page at a time. It may seem best for you to start at the top staff (1st alto) and transpose his part (if any) for the specific measures on that score page. Continuing on down the score paper, complete each part.
- 85) It really doesn't matter whether you fill in the page horizontally or vertically. By doing it, you will find the most natural approach that fits you.
- 86) Be very careful that when extracting inner harmony parts from the sketch you do not jump a voice above or below.
- 87) Get in the habit of doublechecking parts where accidentals are included, even when you have included the accidental the first time it occurred. It is easy to forget that same accidental when it is repeated in ANOTHER VOICE of the same measure. This is a problem because you extract from the sketch horizontally, but you voice your sketch vertically.
- 88) After finishing a score page, proof the page for measures or beats left out. Check if all the articulation, dynamics, and tempo markings are included as well as general instructions.
- 89) Try to catch repeated inner harmony notes while extracting from the sketch. If you have marked these spots on the sketch with an X where they occur, the X's will remind you when crossing voices. In a situation like this it is helpful many times to work VERTICALLY at that point. This enables you to make sure you haven't omitted a note.
- 90) As you are completing the score you also have another opportunity to double or triple check your sketch. Sing along as you write in parts. Be "into" your melodic, rhythmic and harmonic ideas.
- 91) When the score is completed, do one more final check for discrepancies and omissions.

### WHAT TO WRITE?

- 92) Many of you who are attempting your first chart, or the first chart you do after studying this book, may wonder or search for the particular tune or style to work with.
- 93) This obviously is a very personal matter, but I would make these suggestions:
- a) Don't try to conquer the world the first time out. You can't compete with professionals who have written literally thousands of charts.
  - b) Instead, your goal should be to write a chart that benefits YOU the most. This is done by writing an effective chart that captures the conception and requirements YOU set, with a minimum of goofs and misjudgments.
  - c) Go in search of a tune. I would NOT recommend trying to compose an original. Composition is something else again, so let's try to accomplish one thing at a time.
  - d) Go to the KIND OF MUSIC YOU LIKE BEST! Be it rock, Basie, ballads, or jazz waltzes, pick one you really dig and one that you have opinions about and have been exposed to.
  - e) This choice should make it as natural as possible to hear melodic ideas, phrasings and voicing sounds. You need something familiar to relate to, because you are now the one who must decide if an idea makes it or not.
  - f) Stay in that style for a few charts. Your goal is to write GOOD arrangements, handling all the many problems musically. As you begin to accomplish this, you can branch out into other styles and requirements.





## SECTION VI – ARRANGING STYLES

### Chapter 22: Jazz, Rock, Popular and Commercial Styles

- 1) At this point in this book, we have defined the components and factors that make up the art of arranging. If these individual techniques and approaches have been absorbed, the knowledge should help you achieve the end product, a good finished arrangement.
- 2) In most cases, however, the reason for the arrangement is to conform to some desired musical result. This can range from writing your own jazz charts for your own band (for kicks) or pursuing a professional career of seriously writing for money and being able to write whatever is needed and called for.
- 3) It is toward these goals that this chapter is directed, to specifically define the characteristics of today's musical styles in a way that will help you direct the knowledge you have absorbed toward the specific finished product.
- 4) What no one can give you are the important added factors of talent, desire and work. THE IMPORTANCE OF EXPERIENCE AND STUDY IS TO BE ABLE TO RELATE KNOWLEDGE AND TECHNIQUE TO SOUNDS. At that point YOU have to do your homework, listening, analyzing and experiencing the entire process of arranging in relation to the materials presented in this book.
- 5) The following pages will give general guidelines concerning the critical aspects of these musical styles. They are general in the sense that they try to cover the broad truth.
- 6) There are always exceptions that work. However, you will find it most helpful to use the following stylistic breakdowns as a starting point to reach your own conclusions about these styles, and as a point of departure and direction for the information you have absorbed.

#### BREAKING DOWN MUSICAL STYLES

- 7) In most of the styles we will discuss, you will find similar considerations. The first is the category.
- 8) This simply means the broad, overall description of the style, such as jazz or rock or commercial.
- 9) CONCEPTION relates to the impact of the specific style we are discussing. This is the guiding goal behind our intuitive ideas that help us determine the best approaches and treatments. You may find a sub-heading of CONVENTIONAL or STYLIZED. "Conventional" indicates that the conception relates to the normal, middle of the road implication of the style. "Stylized" means that the conception is a more sophisticated, rather special way of thinking, and not always generally accepted.

- 10) **STYLE**, in this sense, concerns the more obvious individual features of the style, the trademark of the style.
- 11) **MELODY** defines the role of melodic considerations to the overall factors. You will often find the **PRIME FACTOR** included here. This ties in with Tables 34 and 35. It means that when making a decision between two points of view, melody should win because the particular style **NEEDS** the importance of melodic considerations to be primary.
- 12) **MELODIC SCALE SOURCES** refers to the actual scale sources that most frequently characterize the music written in the particular style being discussed. This does not mean that other scales and sources are not possible. It does imply that when you use other scales, you are effecting a change of sound and you should be aware of it.
- 13) **COUNTERPUNTAL DEVICES**: This has to do with the use of all devices ranging from rhythmically interested interplay between melody and countermelody to full-fledged two, three or four part counterpoint. If **RESTRICTED** is indicated, it implies that only under certain conditions, where the material lends itself – and the **EFFECT OF COUNTERPOINT** is musically beneficial – would you treat a portion of the chart in this manner. The context, rhythmically and melodically, that the counterpoint is written in allows you a wide latitude of possibilities, and all this has to be evaluated and judged according to the specific situation.
- 14) **PHRASING** relates to the importance of the markings and phrasings to the character of the style. **VERY FLEXIBLE** means, for example, that imaginative melodic ideas can be used, and phrased any way you wish to go.
- 15) If specific conditions are important to the validity of the style, then you will find these conditions defined. They will, therefore, be part of your decision-making process.
- 16) **ARTICULATION** is a rather broad area. With any kind of articulation markings we are really using the same source of possibilities as defined in Table 10 in Chapter 4.
- 17) However, in certain styles such as jazz and rock, the normal “sound” dictates complete definition of articulation throughout. In certain styles you will find the **MOST CHARACTERISTIC** articulation marking emphasized.
- 18) **DENSITY**: Obviously, this relates back to our study of the levels of density in Section IV and all of the implications referred to go in that section. Density is closely related to voicings, as we approached our theory of density in close relationship to **HOW THE DIFFERENT LEVELS OR PARTS OF HARMONY ARE VOICED**. Certain styles are more restrictive than others and when this exists, it is pointed out.
- 19) **SPAN OF ORCHESTRATION** is another general category in that – depending on the instrumentation – most extremes of the spans are possible. Think of this area in terms of the **BASIC INSTRUMENT RANGES** discussed in Chapter 12, Section IV.

- 20) The references to **ENSEMBLE SPAN** concern the typical ensemble **SOUND** of the style, relative to the span or distance from top to bottom of the brass/saxes or brass/woodwind ensemble voicings.
- 21) **VOICINGS**: This area also will be varied in its descriptions. Varied in the sense that characteristic voicing sounds will be listed. Many of these will seem obvious, but a great deal of the more conventional musical styles do use the obvious and the same voicing sounds.
- 22) **SPECIAL ATTENTION TO BASIC TECHNIQUES** can be used as a tie-in and review of the sixteen Basic Techniques highlighted throughout the book. Although you have worked with these techniques as you proceeded through the book, you should find this review of them in relationship to a style to be a further insight into the character of that style.
- 23) **REHARMONIZATION OR HARMONIC LATITUDE** is discussing the need or lack of need to harmonically manipulate the original harmonization of the lead sheet or sheet music you work from when you start your sketch. Strengthening weak chords, adding or subtracting chords all fall into this area. Changing chords of a tune written in one particular style to conform to the sound of a different style would also be included in this area.
- 24) Some styles, such as jazz, are so broad that this category really is dependent on the overall concept and original material. It is enough to say that before starting **ANY ARRANGEMENT**, we need to review the original harmonizations and, if something really needs help harmonically, we should lend such help.
- 25) Reharmonization can be a dangerous weapon in the hands of an arranger who does not realize the effect it can have on a chart. The ear of the listener constantly compares the sound you are writing to his past experiences. If you are overboard with "changing" and reharmonizing, you can defeat the entire chart by distorting the original harmonization at the wrong places and for abnormal lengths of time.
- 26) **SECTIONAL VOICINGS** means using standard band sections such as saxes, woodwinds, trombones, brass and ensemble approaches of orchestration as opposed to mixed voicings between the various instrument families. The more commercial and conventional musical styles have a great tendency towards these sectional voicings.
- 27) In some instances where they are prevalent, you can knowingly "update" that style by incorporating some mixed voicings **WHERE THEY ARE NOT EXPECTED**.
- 28) **MIXED SECTION VOICINGS** (as explained above) are characteristic of more sophisticated styles and concepts. The entire mixed section approach can be applied in a great number of gradations and for this reason you can **CONTROL** your application of them.
- 29) When a style employs voicings such as open and closed 4ths, clusters and the more advanced plural chord relationships, the mixed section voicings are the natural complement of their sound.
- 30) **TREATMENT**: This will describe characteristic sounds, techniques and orchestral combinations for the given style. If reference is made to Tables 34 to 37, then those items indicated should be checked in the Tables.
- 31) **ACCOMPANIMENT** will describe ways of effecting the accompaniment treatments that are typical of the style. If **PRIME FACTOR** is indicated, this again refers to Table 36.
- 32) **FORM**. In Chapter 20, **CONVENTIONAL** and **NEW COMPOSITE FORMS** were discussed and defined. This heading will refer to these approaches. Conventional form means that the style does not characteristically use the extensions and variations described in **NEW COMPOSITE FORMS**.

- 33) If NEW COMPOSITE FORMS are indicated this will not automatically imply a blanket application of anything or everything possible, but should always be used in the context of a specific situation.
- 34) SOLO PROPORTIONS will generally indicate if the style uses solos, and if it does, the importance of solos, reflected by the amount of time assigned to solos. "Moderate to great" would imply half of the arrangement, to practically the entire chart. This would be consistent with a SOLO FEATURE number where the bulk of the chart is built around the featured player.
- 35) In a conventional jazz-styled chart the form usually states the thematic material through one or two choruses, going to one to several solos, then the original thematic material again, and the ending. In this distribution the solos would easily be receiving half of the total time of the chart.
- 36) RHYTHM: The relative importance of the rhythm section and rhythmic characteristics to the style will be defined.
- 37) In certain styles such as rock, a particular instrumentation is critical to getting the right rhythm section sound; certain meter or rhythmic traits such as 12/8 time feel or rolled 8th notes will be pointed out, if characteristic.
- 38) If these considerations are, therefore, a PRIME FACTOR they should take preference over one of the other factors such as melody or accompaniment, as indicated.
- 39) SPECIAL ORCHESTRAL NOTES: This will specify certain instrumentations that trademark a stylistic sound and vice versa. These indications do not mean that you can't comfortably write in a style with variations of the instruments suggested. You can still conform to all the other factors that are characteristic. On occasion it is extremely effective to change from the normal instrumental sound associated with a style to achieve a freshness and variation. These special orchestral notes, therefore, give you a point of reference to work with either way.
- 40) SUGGESTED LISTENING obviously refers to some key recordings in the style being discussed. In practically all cases, the name of the artist and name and number of the album are given. It would stand to reason, in most instances, that other albums by those same artists would include charts in the same styles. These can be checked against your own record collection or availability.

## CATEGORY: JAZZ

- 42) **CONCEPTION:** Hard, driving big band jazz.  
       Conventional: Dependent on composition.  
       Stylized: Dependent on composition.
- STYLE:** Very flexible. Modern conception, interpretation of all factors.
- MELODY:** Very flexible, but defined. PRIMARY FACTOR.
- MELODIC SCALE SOURCES:** All scales and modes.
- CONTRAPUNTAL DEVICES:** Limited.
- PHRASING:** Very flexible, BUT DEFINED.
- ARTICULATION:** Standard jazz markings.
- DENSITY:** One to eight parts.
- SPAN OR ORCHESTRATION:** All spans. Ensemble spans over two octaves.
- VOICINGS:** Tendency to ensembles, obvious section treatments of melody and accompaniment.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** All Basic Techniques.
- REHARMONIZATION OR HARMONIC LATITUDE:** Amount used in proportion to concept; greater latitude as concept is more stylized.
- SECTIONAL VOICINGS:** Used for both melodic and accompaniment factors.
- MIXED SECTION VOICINGS:** Prevalent; typical when clusters, 4ths and plural chord relationships are used.
- TREATMENT:** Unison/octave jazz lines. Ensemble. Comping and rhythmic backgrounds.
- ACCOMPANIMENT:** Comping rhythmic patterns, countermelodies, sustained pads, riffs.  
       PRIME FACTOR.
- FORM:** Conventional to new composite forms.
- SOLO PROPORTIONS:** Moderate to extensive.
- RHYTHM:** Straight jazz conception. Reliance on individual players.
- SPECIAL ORCHESTRAL NOTES:** Regular big bands to combos; one guitar (electric), saxes (including soprano sax) and woodwinds; French horns, tuba; percussion is not typical.
- SUGGESTED LISTENING:** Mel Lewis/Thad Jones Band: CENTRAL PARK NORTH  
       (Solid State – SS18058)



## CATEGORY: JAZZ

- 43) CONCEPTION:** Straight ahead jazz. Conventional.
- STYLE:** Flexible; emphasis on melody and harmony.
- MELODY:** Stylized jazz sources, specifically defined. **PRIMARY FACTOR.**
- MELODIC SCALE SOURCES:** All scales and modes.
- CONTRAPUNTAL DEVICES:** Larger proportion: Bill Holman is an outstanding writer in this approach.
- PHRASING:** Flexible.
- ARTICULATION:** Standard jazz markings.
- DENSITY:** One to six parts.
- SPAN OF ORCHESTRATION:** One to six octaves.
- VOICINGS:** Block, 5 and 6 part open voicings. Saxes and trombones; bari sax with trbs; sax melody with trbs. and/or brass background.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 7, 8, 11, 13, 14, 15, 16. The Plural Chord Relationships are not fully exploited.
- REHARMONIZATION OR HARMONIC LATITUDE:** Moderate amount; standard passing chord approaches.
- SECTIONAL VOICINGS:** Great reliance on both melodic and accompaniment factors.
- MIXED SECTION VOICINGS:** Not extensive. Typical would be woodwinds with trumpets (possibly muted) for melodies and countermelodies.
- TREATMENT:** Obvious section approach. Little use of sophisticated fragmentary or involved effects.
- ACCOMPANIMENT:** Pads, countermelodies, directional background effects, overlaps, basically harmonic. Primary factor.
- FORM:** Conventional to some applications of new composite forms.
- SOLO PROPORTIONS:** Moderate to extensive.
- RHYTHM:** Straight jazz conception. Reliance on individual players. No particular emphasis as primary factor.
- SPECIAL ORCHESTRAL NOTES:** Regular big bands to combos: one guitar (electric; saxes (including soprano sax) and normal woodwinds. Organ. Percussion is not typical, but possible.
- SUGGESTED LISTENING:** Buddy Rich: **BEST OF BUDDY RICH** (World 20169); Count Basie: **HAVE A NICE DAY** (Day 2005); **SUPER CHIEF** (Col. G 31224).

**CATEGORY: JAZZ**

- 44) **CONCEPTION:** Ballads. Conventional.
- STYLE:** Full, orchestral.
- MELODY:** Broad, some double time passages. Primary factor.
- MELODIC SCALE SOURCES:** Major, Minor, Dorian Mode, Dim., Dom. 8 note scales, Blues and Mixolydian modes.
- COUNTERPUNTAL DEVICES:** Not emphasized.
- PHRASING:** Slow ballads; flowing, broad. With a beat, some definition.
- ARTICULATION:** Adhere to specific cut-offs on held tones. Generally legato.
- DENSITY:** One to six parts. Primary factor.
- SPAN OF ORCHESTRATION:** One to six octaves. Ensemble 1½ to 3½ octaves.
- VOICINGS:** Block, 5 and 6 part open voicings.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 7, 8, 11, 13, 14 and 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** Moderate. Basic lead sheet harmonizations should be strengthened. Standard passing chords.
- SECTIONAL VOICINGS:** All possibilities.
- MIXED SECTION VOICINGS:** Used comparatively little.
- TREATMENT:** Section and ensemble backing of soloist or melodic treatment. Some use of pedal point.
- ACCOMPANIMENT:** Primary factor. Sustained pads, directional backgrounds, overlaps, countermelodies, pedal point, obligato.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Ballads are often used as solo vehicles.
- RHYTHM:** Not primary.
- SPECIAL ORCHESTRAL NOTES:** Typically no percussion; one guitar (rhythm); piano, double organ.
- SUGGESTED LISTENING:** Buddy Rich, THE NEW ONE (World Pacific); Count Basie, EVERGREENS (G · M2201); Maynard Ferguson, M. F. (Col. 31117).



**CATEGORY: JAZZ**

- 45) **CONCEPTION:** Sophisticated and Compositional.  
Stylized: Moderate to Fast Tempos.
- STYLE:** Sensitive, sophisticated approach.
- MELODY:** Rhythmically flexible; jazz characteristics; some double time passages.  
Fragmentary development; sequential applications. Primary factor.
- MELODIC SCALE SOURCES:** All scales.
- COUNTERPUNTAL DEVICES:** Typical.
- PHRASING:** Flexible.
- ARTICULATION:** Broad.
- DENSITY:** One to eight parts. Primary factor.
- SPAN OF ORCHESTRATION:** One to six octaves.
- VOICINGS:** 4ths, clusters, plural chord relationships fully used.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 4, 6, 9, 10, 12, 13, 14, 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** Extreme use; all passing chord approaches; bass line reharmonization technique.
- SECTIONAL VOICINGS:** Used in brass and ensemble.
- MIXED SECTION VOICINGS:** Full possibilities.
- TREATMENT:** Overall orchestral approach. Typical solo vehicle with orchestra backing.  
Dramatic concept; emotional contour.
- ACCOMPANIMENT:** Primary factor. Smaller span of orchestration.
- FORM:** Conventional and new composite forms.
- SOLO PROPORTIONS:** Moderate to great.
- RHYTHM:** Not primary.
- SPECIAL ORCHESTRAL NOTES:** Use of all woodwinds; French horns, tuba, flugel-horns. One guitar (rhythm); piano; acoustic bass. Subtle drum effects.
- SUGGESTED LISTENING:** Gil Evans, GREAT JAZZ STANDARDS (WP-1270); Dick Grove, LITTLE BIRD SUITE (PJ-74)

**CATEGORY: JAZZ**

- 46) **CONCEPTION:** Sophisticated and Compositional treatment of arrangement.  
**Stylized:** Slow Tempos.
- STYLE:** Very musical. Flexible. Mature conception.
- MELODY:** Primary factor points 8, 10, 11, 12, 13 to 24, 25 to 38 in Table 34; 41 to 61, Table 35.
- MELODIC SCALE SOURCES:** All scales.
- COUNTERPUNTAL DEVICES:** Typical. Use of fragmentary and sequential approaches.
- PHRASING:** Flexible.
- ARTICULATION:** Standard jazz markings. Legato to rhythmic.
- DENSITY:** One to eight parts.
- SPAN OF ORCHESTRATION:** 0 to 6 octaves. This style will use finer shadings of span.
- VOICINGS:** All possibilities.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** All devices in Section IV, with emphasis on 4ths, clusters, plural chord relationships.
- REHARMONIZATION OR HARMONIC LATITUDE:** Unlimited. Use of all passing chord approaches; bass line reharmonization technique.
- SECTIONAL VOICINGS:** Limited use, with exception of ensemble.
- MIXED SECTION VOICINGS:** Prevalent: typical when orchestrating clusters, 4ths, and plural chord relationships.
- TREATMENT:** All possibilities as indicated in Tables 34 to 37.
- ACCOMPANIMENT:** Primary factor. Reference points 69 to 78; 79 to 91; 92 to 100. Table 36.
- FORM:** Usually new composite forms. Can be very original.
- SOLO PROPORTIONS:** Moderate to extensive.
- RHYTHM:** Reference points 106 to 113; 114 to 124; 125, 127, 128; Table 37.
- SPECIAL ORCHESTRAL NOTES:** Use of multi-percussion; all solo instrument possibilities. Typically one guitar. All possible woodwind doubles and keyboard doubles.
- SUGGESTED LISTENING:** Gil Evans, PORGY AND BASS (CS 8085), SKETCHES OF SPAIN (CL 1480), NEW BOTTLE, OLD WINE (WP 1011); Duke Ellington, AND HIS MOTHER CALLED HIM BILL (RCA 3966).

**CATEGORY: JAZZ**

- 47) **CONCEPTION:** Jazz/Rock; hard, rhythmic and melodic approach with rock rhythm section.  
**Conventional:** Use of sectional orchestral approaches; non-stylized voicings.
- STYLE:** Straight ahead effect. Limited scope.
- MELODY:** Primary factor. Some fragmentary and sequential development.
- MELODIC SCALE SOURCES:** Emphasis on modal and blues scales.
- CONTRAPUNTAL DEVICES:** Moderate application.
- PHRASING:** Legato to well-defined rhythmic patterns.
- ARTICULATION:** Standard Rock Phrasings (see Chapter 5, Paragraph 12).
- DENSITY:** One to six levels.
- SPAN OF ORCHESTRATION:** Zero to six octaves. Ensemble voicings 2 to 3½ octaves.
- VOICINGS:** Three through six parts density. Less subtlety in voicings and density concept.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 10, 11, 13, 14 (15 in limited applications).
- REHARMONIZATION OR HARMONIC LATITUDE:** Should be applied to standard progressions to reflect rock harmonic sound. See passing chord characteristics (Chapter 8).
- SECTIONAL VOICINGS:** Sectional orchestration most used.
- MIXED SECTION VOICINGS:** Some use in melodic unison treatment; melodic couplings.
- TREATMENT:** Unison/octaves used great deal.
- ACCOMPANIMENT:** Great use of repetitive patterns; rhythmic attacks on second beat and up-beat of three. Sustained pads.
- FORM:** Conventional to limited applications of new composite forms.
- SOLO PROPORTIONS:** These range from very little to feature solo vehicles.
- RHYTHM:** Very flexible; extensive use of meter (see Table 8, Page  
 Primary factor. Use of bass ostinato.
- SPECIAL ORCHESTRAL NOTES:** Rock rhythm section: two guitars (electric, rhythm), organ, electric piano; tambourine; non-tonal percussion family, group A; woodwind doubles; mutes.
- SUGGESTED LISTENING:** Don Ellis, TEARS OF JOY (Col. 30927); Lalo Schifrin, ROCK REQUIEM (Verve 8801); Woody Herman, BRAND NEW (Fan 8414); Bill Chase, CHASE (EPI-E30472); Quincy Jones, SMACKWATER JACK (A&M 3037).

**CATEGORY: JAZZ**

- 48) **CONCEPTION:** Latin/Jazz  
Conventional and Stylized.
- STYLE:** All jazz styles superimposed over Latin rhythm feel.
- MELODY:** All jazz implications related to Latin patterns. Unison/octave treatment important. Primary factor.
- MELODIC SCALE SOURCES:** All scales.
- CONTRAPUNTAL DEVICES:** Very typical. Resultant rhythmic patterns extremely important.
- PHRASING:** Legato to hard, defined rhythmic patterns.
- ARTICULATION:** Define everything. Jazz oriented.
- DENSITY:** One to eight levels.
- SPAN OF ORCHESTRATION:** One to six octaves. Ensemble span 1½ to 3½ octaves.
- VOICINGS:** Typically three through six parts density. Harmony less than prime factor.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16.
- REHARMONIZATION OR HARMONIC LATITUDE:** Not emphasized. Standard passing chord sources.
- SECTIONAL VOICINGS:** Sectional orchestration most used.
- MIXED SECTION VOICINGS:** Used with application of 4ths, clusters, melodic unison/octave lines.
- TREATMENT:** Use of pedal, ostinato. Ensemble proportion large.
- ACCOMPANIMENT:** Typical, well defined rhythmic patterns.
- FORM:** Conventional to new composite forms.
- SOLO PROPORTIONS:** Moderate to great.
- RHYTHM:** Primary factor. Bass usually pattern type of ostinato, frequently featured in extended solo sections.
- SPECIAL ORCHESTRAL NOTES:** Large rhythm section. Particularly applying non-tonal percussion family, group A. Some use of woodwinds.
- SUGGESTED LISTENING:** Quincy Jones, NDEDA (Mer. SRM 2-623).

## CATEGORY: JAZZ

- 49) **CONCEPTION:** Blues  
 Conventional: Traditional big band concept.
- STYLE:** Conventional jazz implications. Minor blues equally effective.
- MELODY:** Use of melodic couplings; blues harmonization of melody (see Chapter 8, Paragraphs 70 to 75), primary factor.
- MELODIC SCALE SOURCES:** Blues scale, Mixolydian mode; Dom., Dim., 8 note scales.
- CONTRAPUNTAL DEVICES:** Moderate application.
- PHRASING:** Emphasis on 12/8 rhythmic phrasing; rolled 8th notes.
- ARTICULATION:** Well-defined jazz style.
- DENSITY:** One through six to seven levels.
- SPAN OF ORCHESTRATION:** One to six octaves. Ensemble span 1½ to 4 octaves.
- VOICINGS:** Conventional choices. Can be highly sophisticated.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 6, 7, 8, 11, 13, 14, 15, 16.
- REHARMONIZATION OR HARMONIC LATITUDE:** Wide scope of possibilities (see Encyclopedia of Harmony and Theory, Volume III, Dick Grove Improvisation Course, Recording R1003).
- SECTIONAL VOICINGS:** Saxes, Trombones, Brass.
- MIXED SECTION VOICINGS:** Little emphasis.
- TREATMENT:** Use of typical "riff" backgrounds. Often in four measure phrases.  
 Variations of "Basie" approach of concerted ensemble blues choruses.
- ACCOMPANIMENT:** Section background phrases; ensemble behind solos. Primary factor.
- FORM:** Normal 12 measure blues (any meter). New composite forms add a great deal of interest. Form can be other than 12 measure blues.
- SOLO PROPORTIONS:** Moderate to extensive, including solo choruses that can be "opened up" to any length.
- RHYTHM:** Usually standard 4/4 meter, normal jazz rhythm section sound.
- SPECIAL ORCHESTRAL NOTES:** Use of organ; little percussion. Saxes more predominant than woodwinds.
- SUGGESTED LISTENING:** Gerald Wilson, FEELIN' KINDA BLUES (PJ20099);  
 Maynard Ferguson, SCREAMIN' BLUES (MAI - MRL316)

**CATEGORY: JAZZ****50) CONCEPTION: Blues**

Stylized: Sophisticated devices, special orchestration and voicings.

STYLE: Higher harmonic level; greater adherence to thematic and scale materials.

MELODY: Use of melodic fragmentary development.

SPECIAL ATTENTION TO BASIC TECHNIQUES: Nos. 4, 5, 6, 9, 10, 12, 13, 14, 15 and 16.

REHARMONIZATION OR HARMONIC LATITUDE: Extreme usage as well as reharmonized bass line approach.

SECTIONAL VOICINGS: Less emphasis.

MIXED SECTION VOICINGS: Predominant.

TREATMENT: Flowing, consistent, emotional contour.

FORM: New composite forms, utilizing blues characteristics with preference for modal, melodic and harmonic sources.

SOLO PROPORTIONS: More of a tendency to feature solo performances.

RHYTHM: Meter flexible, accent on individual player's capabilities.

SPECIAL ORCHESTRAL NOTES: Greater use of orchestral color; woodwinds, percussion, French horns, tuba.

SUGGESTED LISTENING: Gil Evans, GREAT JAZZ STANDARDS (WP-1270)

**CATEGORY: ROCK**

- 51) CONCEPTION:** Big band (instrumental or vocal background).  
Conventional.
- STYLE:** Instrument accompaniment treatments to melody. Solo (tenor, organ) sections. Vocal; optional intro; vocal and rhythm building background. Careful attention should be paid to ending.
- MELODY:** Primary factor.
- MELODIC SCALE SOURCES:** Major, Minor, Dorian, Mixolydian modes.
- CONTRAPUNTAL DEVICES:** Rare.
- PHRASING:** Little rephrasing. Some rhythmic definition.
- ARTICULATION:** Standard rock articulation. (See Chapter 5, Paragraph 12.)
- DENSITY:** One through four levels density.
- SPAN OF ORCHESTRATION:** One to six octaves.
- VOICINGS:** Not of primary importance. Unison/octave; melodic couplings; intervals; triads and implied four and five part. Block.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.
- REHARMONIZATION OR HARMONIC LATITUDE:** Very little. Most passing chords utilize DIATONIC APPROACH. Unison/octave melodic treatment usually avoids problem.
- SECTIONAL VOICINGS:** Basic source of rock sound.
- MIXED SECTION VOICINGS:** Little use.
- TREATMENT:** Simple melodic treatment. Adherence to choppy, changing orchestration, change of sound.
- ACCOMPANIMENT:** Sustained pads, rhythmic brass figures. Bass lines.
- FORM:** Stay with original form. Little change, conventional form of composition best.
- SOLO PROPORTIONS:** Moderate.
- RHYTHM:** Primary factor. Focal point of arrangement. Parts should be guides, allowing individual players to interpret.
- SPECIAL ORCHESTRAL NOTES:** Full percussion possibilities (non-tonal percussion family [group A]; minimum use of woodwinds; French horns; tuba; organ; electric piano).



**CATEGORY: ROCK**

- 52) **CONCEPTION:** Combo (three to ten players).  
**Conventional:** Dependent on material.
- STYLE:** Dependent on instrumentation; instrumental or vocal.
- MELODY:** Primary factor. Non-harmonized treatment.
- MELODIC SCALE SOURCES:** Modal, minor, major.
- CONTRAPUNTAL DEVICES:** Typical.
- PHRASING:** Non-syncopated.
- ARTICULATION:** Legato; some rhythmic definition.
- DENSITY:** One to five levels.
- SPAN OF ORCHESTRATION:** One to six octaves. Ensemble span, dependent on instrumentation.
- VOICINGS:** Flexible.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1 to 10, and some applications of 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** Very little. Diatonic passing approach.
- SECTIONAL VOICINGS:** Dependent on instrumentation; brass.
- MIXED SECTION VOICINGS:** Guitar(s) with organ (piano, electric piano).
- TREATMENT:** Obvious melodic approach; accompaniment possibilities dependent on instrumentation and solo proportions.
- ACCOMPANIMENT:** Arpeggiated chordal background; counter melodies; pedal point; ostinato. Harmonic definition.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Moderate to great.
- RHYTHM:** Primary factor. Focal point of arrangement. Parts can be mainly guides, allowing individual players to interpret.
- SPECIAL ORCHESTRAL NOTES:** All key possibilities, electric bass, all guitars, flutes, sax solos, brass section.
- SUGGESTED LISTENING:** Blood, Sweat and Tears, #3 (Col. 30090); Crosby, Stills, Nash and Young, DEJA VU (SD 7200); Emerson, Lake and Palmer, EMERSON, LAKE AND PALMER (SD 9040); Cream, DISRAELI GEARS (SD 33-232); Chicago, CHICAGO V (Col. KC31102).

**CATEGORY: POPULAR/ROCK**

- 53) **CONCEPTION:** Commercial rock approach to boogaloo/swamp tempo; instrumental or vocal background.  
Conventional.
- STYLE:** Basic **DOUBLE TIME FEELING** in ALL rhythmic aspects of this style.
- MELODY:** Primary factor. Greater use of unison/octave sound due to this ideal solution to the complicated rhythmic patterns.
- MELODIC SCALE SOURCES:** Major, minor, modal.
- CONTRAPUNTAL DEVICES:** Restricted usage.
- PHRASING:** Define ALL rhythmic passages (see Chapter 5, Paragraph 12). Accented (long, short) brass background attacks; legato sustained pads.
- ARTICULATION:** All articulation indications (see Table 10).
- DENSITY:** Three part and implied four and occasionally five part density, generally confined to brass supportive figures, particularly on the second beat of the measure.
- SPAN OF ORCHESTRATION:** One to six octaves; ensemble span 1½ to 3 octaves.
- VOICINGS:** Strong brass accents, saxes for melody or background, trombones.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1 through 11, and restricted applications of 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** Very little, diatonic passing chord approach.
- SECTIONAL VOICINGS:** Saxes, trombones, brass, trumpets, ensemble.
- MIXED SECTION VOICINGS:** Very little.
- TREATMENT:** Solo keyboard or guitar, tenor sax: melodic treatment by saxes or trumpets; background, sectional orchestration.
- ACCOMPANIMENT:** Secondary factor; sustained pad; unison double time figures; brass accents.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Moderate: keyboard, guitar, tenor sax.
- RHYTHM:** Primary factor: most important function in this style; "flow" must be maintained by rhythm section. Barest rhythmic and harmonic guidelines.
- SPECIAL ORCHESTRAL NOTES:** Permit parts to be interpreted more naturally. Let the rhythm section shine through! Normal rock rhythm section instrumentation; percussion, keyboard doubles, saxes, woodwinds, trumpets, possible French horns used in brass section.

## CATEGORY: POPULAR/ROCK

- 54) **CONCEPTION:** Commercial rock approach to shuffle tempo; instrumental or vocal background.  
Conventional.
- STYLE:** Strong rhythmic feel characterizing sax and brass patterns. Gradual build evolving through arrangement.
- MELODY:** Primary factor. Emphasis on unison/octave/two part treatment.  
No concerted harmonization over three parts or implied four or five part.
- MELODIC SCALE SOURCES:** Major, minor modal.
- CONTRAPUNTAL DEVICES:** Restricted.
- PHRASING:** Define all rhythmic passages (see Chapter 5, Paragraph 12). Sustained legato background.
- ARTICULATION:** Short 8th note articulation; define quarter notes.
- DENSITY:** One to four parts.
- SPAN OF ORCHESTRATION:** One to three octaves. Ensemble span 2½ to 3 octaves.
- VOICINGS:** Unison/octave/two part saxes, trumpets or flugelhorns. Trombones, brass.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Through 10; restricted application of 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** None; diatonic passing chord approach.
- SECTIONAL VOICINGS:** Saxes, trombones, brass, trumpets, ensemble.
- MIXED SECTION VOICINGS:** Unison saxes with unison trumpets. Flutes with trumpets.
- TREATMENT:** Solo keyboard, guitar; driving rhythmic brass and/or saxes.
- ACCOMPANIMENT:** Sustained pads or background; sequential patterns. Rhythmic brass background figures.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Written melodic treatment.
- RHYTHM:** Primary factor, dotted 8th - 16th feel or 12/8 feel. Conventional rhythm section functions, 3/4 and 4/4 meter. Let rhythm section shine through.
- SPECIAL ORCHESTRAL NOTES:** Normal rock rhythm section instrumentation; keyboard doubles; saxes and woodwinds; trumpet and flugelhorns.  
Possible French horns.
- SUGGESTED LISTENING:** Jimmy Joyce, FAMILY ALBUM (for rhythm section concept) ; Ray Charles, A 25TH ANNIVERSARY IN SHOW BUSINESS  
SALUTE TO RAY CHARLES (ABC-731).
- SUGGESTED SCORE ANALYZATION:** Score to PROMISES, PROMISES.

**CATEGORY: POPULAR/ROCK**

- 55) **CONCEPTION:** Commercial rock approach to ballad tempos, instrumental or vocal background. Conventional.
- STYLE:** Emphasis on simple orchestral sound, section treatment.
- MELODY:** Unison/octave treatment of primary factor. No concerted harmonization over three parts (occasional four parts or implied five part).
- MELODIC SCALE SOURCES:** Major, minor, modal.
- CONTRAPUNTAL DEVICES:** Madrigal treatment, utilizing counterpoint.
- PHRASING:** See phrasing tips, Chapter 5, normal legato broad approaches.
- ARTICULATION:** Tenuto, some rhythmic definition.
- DENSITY:** One to three parts; to four part for harmonic background definition.
- SPAN OF ORCHESTRATION:** One to four octaves. Ensemble span 2 to 3 octaves.
- VOICINGS:** Very simple, secondary factor. Woodwinds, trombones, flugelhorn or French horn over trombone; brass; woodwinds with trombones or brass.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10.
- REHARMONIZATION OR HARMONIC LATITUDE:** Very restricted. Diatonic passing chord approach, if any.
- SECTIONAL VOICINGS:** Major emphasis.
- MIXED SECTION VOICINGS:** Some usage with unison/octave melodic treatment.
- TREATMENT:** Straightforward melodic approach; sustained accompaniment; arpeggiated chordal accompaniment.
- ACCOMPANIMENT:** Harmonic definition; pedal point; counter melodies.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Little if any solo usage.
- RHYTHM:** Controlled, written parts. Primary factor to establish feel of either straight 8th notes of 12/8 rhythmic concept.
- SPECIAL ORCHESTRAL NOTES:** Standard rock rhythm section; optional piano, organ, electric piano, all guitars, percussion, woodwinds, French horns, flugel horns.
- SUGGESTED LISTENING:** Carole King, TAPESTRY (Ode. 77099), MUSIC (Ode 77013); Roberta Flack, QUIET FIRE (Atl. SD 1594TF).

**CATEGORY: POPULAR/ROCK**

- 56) **CONCEPTION:** Commercial rock approach to MOTOWN rhythmic feel; instrumental or vocal background.  
Conventional.
- STYLE:** Basic quarter note "one" rhythmic feeling. Brass and saxes should reinforce this same rhythmic feeling. Simple harmonic structure.
- MELODY:** Primary factor; unison/octave treatment, saxes or trumpets.
- MELODIC SCALE SOURCES:** Major, minor, modal.
- CONTRAPUNTAL DEVICES:** Restricted situations.
- PHRASING:** Typical rock phrase markings. Characteristic two and four measure phrases. Motown sound will often comprise only a section.
- ARTICULATION:** Define all rhythmic patterns; typical Motown quarter notes; tenuto markings with long accents on all four beats, or on second and fourth.
- DENSITY:** One to three parts density; occasional four or five parts.
- SPAN OF ORCHESTRATION:** One to five octaves; ensemble span 2 to 2½ octaves.
- VOICINGS:** Typical triad and implied four part sounds. Brass or sax harmonized patterns, unison saxes or trumpets; trombone triads.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1 through 10; some 11 and 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** Very restricted. Diatonic passing chord approach.
- SECTIONAL VOICINGS:** Saxes, trombones, trumpets, brass, ensemble.
- MIXED SECTION VOICINGS:** Very restricted; some mixed voicings in unison/octave situations.
- TREATMENT:** Melodic treatment: saxes, woodwinds or trumpets.  
Harmonic: brass, saxes or trombones. Ensemble.
- ACCOMPANIMENT:** Sax, trombone brass or ensemble rhythmic patterns; sustained pads.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Restricted; organ, guitar, saxes.
- RHYTHM:** Primary factor. Characteristic sound of this style. Motown rhythm concept can be verbally indicated as a guide part.
- SPECIAL ORCHESTRAL NOTES:** Normal rock rhythm section; percussion; saxes more than woodwinds; flugelhorn optional, trumpet double.

## CATEGORY: COMMERCIAL

- 57) **CONCEPTION:** Typical 12 to 18 piece dance band arrangements.
- Conventional:** Purpose is to establish sound and feel for dancing. Material is characteristically standard tunes handled in a standard, unsophisticated way.
- STYLE:** Use of block and open harmonization for melody and background figures.  
Straight phrasing; use of modulations; rhythm section flowing and consistent.
- MELODY:** Primary factor. Well defined but not re-phrased or altered to any great extent.
- MELODIC SCALE SOURCES:** Major, minor scales.
- CONTRAPUNTAL DEVICES:** Very restricted.
- PHRASING:** Ballads and slower tempos, legato. Rhythmic situations defined.
- ARTICULATION:** Conventional articulations (Table 10).
- DENSITY:** One through five part density.
- SPAN OF ORCHESTRATION:** One to five octaves; ensemble span 1½ to 3 octaves.
- VOICINGS:** Primary factor. Block, "A," "B" for harmonized melody; same for sustained background plus open five part and implied six and seven part harmony.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1 through 11, 13, 14 and restricted use of 15.
- REHARMONIZATION OR HARMONIC LATITUDE:** Standard chord substitutions.  
Minimum of stylistic changes.
- SECTIONAL VOICINGS:** Saxs, woodwinds (all clarinets), trombones, brass, ensemble.  
Straight, cup and Harmon mutes, hats.
- MIXED SECTION VOICINGS:** Restricted.
- TREATMENT:** Alternating use of sections for melody and accompaniment. Solos used for relief; various levels of written to improvised.
- ACCOMPANIMENT:** Harmonized riffs, sustained pads, brass accents.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Short four to sixteen measure solos; typically trumpet (open or muted) trombone; clarinet; tenor; piano.
- RHYTHM:** Straight rhythm sound. Emphasis on strict tempo, accented two and four.  
Bass in two or four beat. Guitar (rhythm) should play time.
- SPECIAL ORCHESTRAL NOTES:** Clarinet (optional flute and bass clarinet) doubles; mutes for brass.

**CATEGORY: BROADWAY SHOW MUSIC**

- 58) **CONCEPTION:** To conform to accepted style of music scored for the Broadway stage.
- Conventional:** Used in majority of situations.
  - Stylized:** Used in a few rare situations (dependent on show).
- STYLE:** General style is relatively simple and uncomplicated.
- MELODY:** In vocal backgrounds, melody can be optionally doubled in orchestra along with vocal. Bulk of instrumental lead **PRIMARY FACTOR**.
- MELODIC SCALE SOURCES:** All scales.
- CONTRAPUNTAL DEVICES:** Moderate usage.
- PHRASING:** General phrasing approach has "legit" basis; little syncopation.
- ARTICULATION:** Define quarter notes; use of legato and standard markings.
- DENSITY:** One to five part density.
- SPAN OF ORCHESTRATION:** One to six octaves. Ensemble span 1½ to 2½ or 3 octaves.
- VOICINGS:** Primary Factor. Unison, melodic couplings, triads (open and closed), block and some five part open.
- SPECIAL ATTENTION TO BASIC TECHNIQUES:** Nos. 1 through 16.
- REHARMONIZATION OR HARMONIC LATITUDE:** Very restricted. Original harmonization is accepted standard.
- SECTIONAL VOICINGS:** Used for melodic and accompaniment harmonization.
- MIXED SECTION VOICINGS:** Woodwinds and brass mixtures quite common.
- TREATMENT:** Straight treatment of melody, natural accompaniment treatments that are consistent with character of music.
- ACCOMPANIMENT:** Countermelodies, obligatos, sustained pads, pedal point, ostinato, rhythmic patterns, arpeggiated chordal backgrounds. Primary factor.
- FORM:** Conventional.
- SOLO PROPORTIONS:** Restricted. If used, usually written solos (trumpet, woodwinds, piano).
- RHYTHM:** Dependent on character of composition. Straight cut time show music. Secondary factor; smooth, flowing. Accent on second and fourth beats.
- SPECIAL ORCHESTRAL NOTES:** Primary use of woodwinds over saxes; open and muted brass; keyboard doubles; all percussion; all guitars; French horn; tuba.
- SUGGESTED LISTENING:** KISS ME KATE (CSS645); ANTHONY NEWLEY SINGS THE SONGS OF DR. DOLITTLE (LPM 3839); THE HAPPIEST MILLIONAIRE (Vista 5001); FIDDLER ON THE ROOF (UAS 10900); CABARET (ABCD 752).
- SUGGESTED SCORE ANALYZATION:** Scores of any of the above shows.



## CATEGORY — COMMERCIAL

- 59) **PURPOSE OF ARRANGEMENT:** Medley (vocal or instrumental).  
Medleys present specific problems to the arranger that other straight arrangements of only one composition do not.
- 60) This is due to the shortened length of time devoted to each composition. A singer may require a medley of two or three songs, or a production type of medley may run ten minutes and consist of fifteen different songs. Each song may be a complete chorus or only four measures of a song.

MODULATIONS

- 61) In either case, the problem of modulations is of prime importance in any of these medleys, as it is rare when a vocalist will pick the same keys throughout such a medley.
- 62) The first requirement for the arranger is to finalize effective harmonic solutions to each modulation (see Chapter 10). Before any voicings or even lead line sketches are begun, you should detail the harmonic change of key with the chord symbols of your lead sheet and sketch. These must also be interpreted in the particular style of the arrangement. For example, a standard or jazz song will rely mainly on II-V progressions to effect the change of key. In a contemporary rock style, a suspended Gmi7 over a C root will take the place of a II-V (Gmi7-C7) in purpose and effect and be more in keeping with the rock style. This kind of thinking, therefore, starts BEFORE you get into voicings, etc.

EVERY TIME YOU START . . . YOU STOP

- 63) Another set of problems that effects writing arrangements on a group of compositions is that just as you start to go somewhere with the first tune, it ends. You may change key and start on the second tune, etc., etc. The emotional contour and gradual build needed to attain the impact desired for the total medley must be paced over the entire group of songs. This means you can't bring the last eight measures of the first tune to a climactic finish, just because it is the end of the chorus. Instead, you have to see where you will be going two choruses later with the third tune of the medley.
- 64) Although you can have peaks throughout the medley, they need to build in relationship to each other, so that the "topper" is placed at the most effective position in the overall medley.

THE RIGHT TUNES IN THE RIGHT PLACE

- 65) If the tunes involved in the medley are not placed in a logical musical order, the arranger will find it very difficult to bring off his overall arrangement. In the same way, the tempos assigned to the tunes (*if they change*) should have a proper relationship to each other. (See Page 369.)

### LOOKING AHEAD

- 66) A situation which becomes increasingly important as you add more different songs to the medley is that of adjusting the orchestration to the various tunes. Specific tunes often need specific handling in the orchestration. Fast changes from tune to tune will, therefore, often require adjusting the orchestration to fit. Examples would be open to muted brass, woodwinds to saxes, percussion changes, etc.
- 67) When you first lay out your sketch, these considerations should be jotted down as they occur to you.
- 68) In short, a medley demands an even more careful evaluation of the sketch and great caution in making your critical decisions.



### CATEGORY — COMMERCIAL

- 69) **PURPOSE OF ARRANGEMENT:** Production Numbers. (This would include charts for dancers, singers, music behind talk, etc.) It is typical of the type of chart used in live television variety shows, acts built around singers or dancers, and for production numbers in musical shows.
- 70) The basic premise remains the same, the premise being that you are expected to write a chart that will "sound" a certain way, and be in a specific style.
- 71) The difference is that it must be written in disciplined coordination with the dancers, singers or actors.
- 72) The normal procedure starts with a sketch being laid out (either by a rehearsal pianist, or by you) of a measure by measure breakdown of the chart. This sketch should be done on three-line sketch paper, showing the vocal or lead line; keys; form (intro, interludes, ending); emotional contour and all other critical considerations that you as the arranger must be aware of.
- 73) If choreography is involved, accented beats or patterns should be notated in red on the sketch. The problem for the arranger is then to reinforce musically these accents in such a way as to maintain the flow and continuity of the musical phrases, without resorting to choppy, mechanical devices.

- 74) Standard dance effects can be musically stated in the following ways:
- a) **SPINS OR TURNS:** Ascending or descending scale runs in the woodwinds or occasionally saxes or trumpets; glisses by piano or mallet instruments such as vibes, xylophone in percussion.
  - b) **KICKS:** Brass accents, cymbal on drums, rim shots on drums, accents in trombones or saxes.
  - c) **RHYTHMIC DANCE PATTERNS:** Can be reinforced by similar patterns in the brass or saxes. Notes can be added, but not accented to make these patterns more musically coherent.
  - d) **ENTRANCES OF DANCERS (or new entrances by dancers):** These can be handled effectively by bringing in new entrances of basic sections of the band.



#### CATEGORY — HEAD ARRANGEMENTS

- 75) **HEAD ARRANGEMENTS** are a unique kind of approach to arranging. They involve working out an arrangement without writing down specific notes for each instrument.
- 76) They are more frequently used for and by smaller groups of instruments, especially rhythm section situations.
- 77) The majority of the rock groups work in this fashion, usually starting with a lead sheet (hopefully in the right key) and working, phrase by phrase, to finalize the treatment and style of the arrangement.
- 78) If horns are included, their function in the chart is worked out, possibly getting their parts "by ear", and adding it to the rhythm section foundation that has been established.
- 79) As the arranger in this situation, you are in reality the one making decisions as to what to do and who will do it. Many musicians who work best in this approach do not read music in the sense that studio musicians or musicians in organized big bands do.
- 80) In this case, in order to communicate with them, you are required to tell them their function by singing or playing on your instrument, just what they are to play. As these musicians usually have a highly developed ear, they can pick up phrasing, articulation and/or timing just by listening to your performance of their part. Often when, for example, two horns are involved, the second horn will find his own harmony part by ear. If not, then you would be required to sing or play the second part, and he would learn it as a melody would be learned.

- 81) Particularly when working with rhythm section players, use descriptive terms to identify and clarify the effect you wish. Give a guitarist four measures of a C7, a tempo, and tell him to play a shuffle rhythm pattern and you don't HAVE to write it out. He will interpret the C7 with the proper rhythmic feeling and voicing that he knows.
- 82) Your role as this type of arranger means that you have a conception of the style of the arrangement, and where you are going with it as it unravels. This is so because you can hear the end effect and overall conception.
- 83) You should, of course, prepare for this type of rehearsal in advance. It is important for you to take charge, and control the rehearsal. You must be as clear and to the point as possible, regarding what you want the musicians to play. You can sketch out exactly what you want, referring to the sketch as you communicate with the players.
- 84) It is a big advantage if the musicians are used to playing with each other. The "togetherness" that is a result of familiarity will add to the speed and effectiveness with which the arrangement can be put into final form.

### CONCLUSIONS


This entire book has been devoted to presenting the technical foundation, problems and possibilities that confront the arranger. The chapters on density unravel the vast scope of voicings available to you and, hopefully, present them in a way that will enable you to relate fact and written notes to sounds, the ultimate process that is necessary.

A lot of words have been written about the conception and overall effect of the arrangement. I have devoted the space to this because most beginning arrangers are understandably confused in this area. The normal tendency for the beginning or inexperienced writer is to become absorbed with the technique and detail of arranging, and as a result, fail to see the overall concept of what he is writing. Learn the techniques and details, but then start HEARING ideas in your head and correlating them to the techniques you have learned. Only then do you write the arrangement, instead of the arrangement writing you! You cannot wait to find out how it worked AFTER IT HAS BEEN PLAYED. You have to KNOW and HEAR this as you write it.

I have also explained the WORKING PROCEDURES that you need to accomplish your goals with speed and effectiveness. By following these suggestions, you will circumvent many of the mistakes and omissions that most beginning writers make. However you finally form your own working procedure, use my suggestions as a starting point, adjusting and inventing the variations that seem to fit your individual disposition best.

The importance of doing your homework in regards to listening and analyzing scores cannot be stressed too strongly. You, at some point, have to become a critic of what you hear. An arranger needs to really HEAR what he hears, in terms of orchestration, density and concept. You have been listening to music all your life, now you need to listen from the standpoint of HOW IT WAS PUT TOGETHER. In the end, you utilize this same process to judge and criticize your own ideas before you commit them to paper, saving countless hours of changing your mind, erasing and generally being miserable.

I hope you will make the most of what is presented in ARRANGING CONCEPTS and that it will start you towards the rewards and satisfaction that writing has to offer.







(A)

Handwritten musical score for measures 9-12. The score is written for four staves. The first staff is labeled (TRPS) and the second (TRBS). The third staff is labeled (W.W'S) and the fourth (PNO). The key signature is one flat (Bb) and the time signature is 4/4. Measure 9 has a circled measure number (9). Measure 10 has a circled measure number (10). Measure 11 has a circled measure number (11). Measure 12 has a circled measure number (12). The score includes various musical notations such as eighth notes, quarter notes, and rests. There are also handwritten annotations: "II-III" above measure 9, "I-II" above measure 10, "mf" above measure 10, and "ALTO C." above measure 11. The piano part (PNO) is written in the bottom staff with a circled measure number (9) and a circled measure number (10).

Handwritten musical score for measures 13-16. The score is written for four staves. The first staff is labeled (TRPS) and the second (TRBS). The third staff is labeled (W.W'S) and the fourth (PNO). The key signature is one flat (Bb) and the time signature is 4/4. Measure 13 has a circled measure number (13). Measure 14 has a circled measure number (14). Measure 15 has a circled measure number (15). Measure 16 has a circled measure number (16). The score includes various musical notations such as eighth notes, quarter notes, and rests. There are also handwritten annotations: "ALTO C." above measure 13, "mf" above measure 14, and "PNO" above measure 15.

Handwritten musical score for measures 17-20. The score is written for four staves. The first staff is labeled (TRPS) and the second (TRBS). The third staff is labeled (W.W'S) and the fourth (PNO). The key signature is one flat (Bb) and the time signature is 4/4. Measure 17 has a circled measure number (17). Measure 18 has a circled measure number (18). Measure 19 has a circled measure number (19). Measure 20 has a circled measure number (20). The score includes various musical notations such as eighth notes, quarter notes, and rests. There are also handwritten annotations: "ALTO C." above measure 17, "mf" above measure 18, and "PNO" above measure 19.

## CONDENSED SCORE

## SCUFFLE

Page 3

(trps)

(trss)

(w.w's)

(PNO)

(IV Trp. Ped)

(I-II)

(II-III)

FLUTE/SOP. SA/VIB

(trps)

(trss)

(w.w's)

(PNO)

(II-III 1st MUTE)

(+1 Trp)

(29)

(30)

(31)

(32)



## CONDENSED SCORE

## SCUFFLE

Page 4

Handwritten musical score for measures 33-36. The score is written for four staves. The first staff is labeled (TRPS). The second staff is labeled (TRBS). The third staff is labeled (W.W's) and the fourth staff is labeled (PNO.). Measure numbers 33, 34, 35, and 36 are circled. A handwritten note "(+ TRS)" is written above measure 34.

Handwritten musical score for measures 37-40. The score is written for four staves. The first staff is labeled (TRPS). The second staff is labeled (TRBS). The third staff is labeled (W.W's) and the fourth staff is labeled (SOP. SX. TEN.). Measure numbers 37, 38, 39, and 40 are circled. A handwritten note "(I TEN SOLO)" is written above measure 39. A handwritten note "(DRM. FILL)" is written below measure 38.

Handwritten musical score for measures 41-48. The score is written for four staves. The first staff is labeled (TRPS). The second staff is labeled (TRBS). The third staff is labeled (W.W's) and the fourth staff is labeled (SOP. SX. TEN.). Measure numbers 41, 42, 43, 44, 45, 46, 47, and 48 are circled. A handwritten note "(I TEN SOLO)" is written above measure 41. A handwritten note "(DRM. FILL)" is written below measure 41. A handwritten note "(OPEN)" is written above measure 42. A handwritten note "(TEN. SOLO)" is written above measure 43. A handwritten note "(TEN. to CL)" is written below measure 43. A handwritten note "(DRM. FILL)" is written below measure 44. A handwritten note "(DRM. FILL)" is written below measure 45. A handwritten note "(DRM. FILL)" is written below measure 46. A handwritten note "(DRM. FILL)" is written below measure 47. A handwritten note "(DRM. FILL)" is written below measure 48.

Ab13	Eb7(+9)	Ab13	Eb7(+9)	Ab13	Db7(+9)	Ab9	
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CH9 SECTION - 6 to 10

## CONDENSED SCORE

## SCUFFLE

Page 5

(Taps.)

(Taps.)

(49) (50) (51) (52) (53) (54) (55) (56)

(Ten Solo)

G7 C7 F7 Bb7 Eb7

(RHY.)

(Taps.)

(Taps.) <sup>mp</sup>

(57) (FL) (58) (59) (60)

(w.w.s) <sup>mp</sup>

(Ten Solo) <sup>Int. S.</sup> Eb7 Ab7 Eb7

(Taps.)

(Taps.)

(61) (62) (63) (64)

(w.w.s)

Ab7 Db7 Ab7

(Ten Solo) <sup>Int. S.</sup>

## CONDENSED SCORE

## SCUFFLE

Page 6

(Tpts.)

(Tbss.)

I-II to St. Music  
III-IV to Harmon

(65) (66) (67) (68) (69) (70) (71) (72)

(W.W's)

G<sup>7</sup> TEN. SOLO / RHY. S. / Gtr. Comp C<sup>7</sup> F<sup>7</sup> Bb<sup>7</sup> Eb<sup>7</sup>

D (Tpts.) (I-III)  
(II-IV)

(Tbss.) mp

(73) (Gtr/Vibes)  
(FL) b

(74) (75) (76)

(W.W's) mp Alto/Cm/B.C.L.

Ab<sup>7</sup> TEN. SOLO / RHY. S. Eb<sup>7</sup> Ab<sup>7</sup> Eb<sup>7</sup>

(Tpts.)

(Tbss.)

(77) (78) (79) (Gtr/Vibes/FL.)  
(Alto/Cm/B.C.L.)

(80)

(W.W's)

Ab<sup>7</sup> TEN. SOLO / RHY. S. Db<sup>7</sup> Ab<sup>7</sup>

## CONDENSED SCORE

## SCUFFLE

Page 7

(TRPS.)

(TRBS.)

(81) (82) (83) (84)

(W.W'S)

G7 TEN. SOLO/RHY. S. C7(b5)

(TRPS.) A (OPEN)

(TRBS.)

(85) (86) (87) (88)

(W.W'S)

F7 TEN. SOLO/RHY. S. Bb7 Eb7

(TRPS.)

(TRBS.)

(89) (90) (91) (92) (93) (94) (95) (96)

(W.W'S)

Ab7 TEN. SOLO/RHY. S. Eb7(+9) Ab7 Eb7(+9) Ab7 Db7(+9) Ab7



## CONDENSED SCORE

## SCUFFLE

Page 8

(Taps.) (I to FLUGELHORN)

(Taps.)

(97) (98) (99) (100) (101) (102) (103) (104)

(W.W.'s) (Fl. to Picc.) (Al. to Flute)

END TENSEL SOLO

G7 C7 F7 Bb7 Eb7

(Taps.)  
I-FLUGELHORN

(105) (106) (107) (108)

(W.W.'s) (D.C.) (TEN SX to SOF SX)

BS/DNS END/GRACIT

(Taps.)

(Taps.)

(109) (110) (111) (112)

(W.W.'s)

BS/DNS

Dem. Fill

## CONDENSED SCORE

## SCUFFLE

Page 9

Handwritten musical score for "SCUFFLE" on page 9. The score is a condensed arrangement for a jazz ensemble, featuring multiple staves with various instrument parts and a bass line. The music is in 4/4 time and includes various musical notations such as notes, rests, and dynamic markings. The score is divided into measures, with measure numbers 113 through 124 circled. The key signature is one flat (B-flat). The score includes parts for (trps), (trbs), (Sax), (CL), (W.W.), (GTR), (B.C.), (Bs), (trpts), (trbs), (Pno), (W.W.), (Bs), (LONG FALL), and (DRM. FILL). The score is written in a condensed style, with many notes and rests indicated by shorthand notation.

Measure numbers: 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124.

Instrument parts and markings:

- (trps)
- (trbs)
- (Sax)
- (CL)
- (W.W.)
- (GTR)
- (B.C.)
- (Bs)
- (trpts)
- (trbs)
- (Pno)
- (W.W.)
- (Bs)
- (LONG FALL)
- (DRM. FILL)

Chord markings: Ab, Db7, Eb7, Ab.

Dynamic markings: f, sf.

Other markings: +III Tapp., +Pucc/Pi., (Pno), (LONG FALL), (DRM. FILL).

## CONDENSED SCORE

## SCUFFLE

Page 10

**F** (Harp) <sup>(to Harp)</sup>

(Harp) <sup>G7</sup> <sup>(II Tes. Solo)</sup> <sup>C7</sup>

(125) <sup>(+ Rhyth. Section)</sup> (126) (127) (128)

VIBES/  
FL./Picc.

(CL.)  
SOP.

(Harp) <sup>IN STAND</sup> <sup>(Harp - IN HAR)</sup>

(Harp) <sup>(Harp)</sup>

(129) (130) (131) (132)

(CL.)

(W.W.S.)

(B.C.)

(Harp) <sup>(II-III-IV To CUP)</sup>

(Harp) <sup>(Harp)</sup>

(133) <sup>(Harp Solo/Ans.)</sup> (134) (135) (136)

(B.C.)

(Picc. to Fl.)





## CONDENSED SCORE

## SCUFFLE

Page 12

(Tras) II Trs. Solo/Rtr. S.

Ab13 (149) Eb7(+9) (150) Ab13 (151) Eb7(+9) Ab13 (152) Ab13 (153) Db9(+9) (154) Ab13 (155) (156)

(w.w's)

(Rpts) II FLAMENCO TRS.

(Tras) II Trs. Solo/Rtr. S.

Ab13 (157) Eb7(+9) (158) Eb7(+9) (159) (160)

(w.w's) (CL/GR.)

(Tras) II Trs. Solo/Rtr. S.

(Tras) II Trs. Solo/Rtr. S.

F#9 (161) Eb9 (162) Eb9 (163) Eb9 (164)

(w.w's)

END TRS. SOLO



## CONDENSED SCORE

## SCUFFLE

Page 14

Handwritten musical score for the first system of "SCUFFLE". The system consists of four staves. The top staff is for the Saxophone (Sax), the second for the Bass (Bass), the third for the Piano (Pno), and the fourth for the Double Bass (D.B.). The key signature is B-flat major (two flats). The time signature is 4/4. The score includes various musical notations such as notes, rests, and dynamic markings like *f* (forte). Measure numbers 177, 178, 179, and 180 are circled in the Piano staff. The bottom staff shows chord progressions:  $Bb7$ ,  $Ab7$ ,  $Bb7$ , and  $Eb7$ . A handwritten note "(Vibes)" is present in the Piano staff at measure 177.

Handwritten musical score for the second system of "SCUFFLE". The system consists of four staves. The top staff is for the Saxophone (Sax), the second for the Bass (Bass), the third for the Piano (Pno), and the fourth for the Double Bass (D.B.). The key signature is B-flat major (two flats). The time signature is 4/4. The score includes various musical notations such as notes, rests, and dynamic markings like *f* (forte). Measure numbers 181, 182, 183, and 184 are circled in the Piano staff. The bottom staff shows chord progressions:  $Ab$ ,  $Db7$ ,  $Eb7$ ,  $Ab$ ,  $A02$ , and  $Bb7$ . A handwritten note "(W.W.S.) (Vibes)" is present in the Piano staff at measure 181.

Handwritten musical score for the third system of "SCUFFLE". The system consists of four staves. The top staff is for the Saxophone (Sax), the second for the Bass (Bass), the third for the Piano (Pno), and the fourth for the Double Bass (D.B.). The key signature is B-flat major (two flats). The time signature is 4/4. The score includes various musical notations such as notes, rests, and dynamic markings like *f* (forte). Measure numbers 185, 186, 187, and 188 are circled in the Piano staff. The bottom staff shows chord progressions:  $Ab7$ ,  $Db7$ ,  $Ab$ ,  $Bb7$ , and  $Eb7$ . A handwritten note "(W.W.S.)" is present in the Piano staff at measure 185.



## CONDENSED SCORE

## SCUFFLE

Page 15

I (Kpts) (M to St. Mute)

(Kpts) (M to St. Mute)

(Trass)

(P.C.)

(PNO) TEN/2. CL/G12

(189) (190) (191) (192)

(Kpts)

(Trass)

(W.W.'s)

(PNO)

(193) (194) (195) (196)

(Kpts)

(Trass)

(P.C.)

(W.W.'s)

(197) (198) (199) (200)

## CONDENSED SCORE

## SCUFFLE

Page 16

Handwritten musical score for the first system of "SCUFFLE". The system consists of five staves. The first staff is labeled "(trps)" and contains a melodic line. The second staff is labeled "(trss)" and contains a harmonic line. The third staff is labeled "(201)" and contains a melodic line. The fourth staff is labeled "(w.w.s)" and contains a melodic line. The fifth staff is labeled "(pno)" and contains a melodic line. The system concludes with a "Drm. Solo" section and a "Drm. Fill" section.

Handwritten notes: (trps), (trss), (201), (202), (203), (204), (205), (w.w.s), (pno), Drm. Solo, Drm. Fill.

Handwritten musical score for the second system of "SCUFFLE". The system consists of five staves. The first staff is labeled "(trps)" and contains a melodic line. The second staff is labeled "(trss)" and contains a harmonic line. The third staff is labeled "(206)" and contains a melodic line. The fourth staff is labeled "(207)" and contains a melodic line. The fifth staff is labeled "(208)" and contains a melodic line. The system concludes with a "Drm. Fill" section.

Handwritten notes: (trps), (trss), (206), (207), (208), (209), Drm. Fill.

Handwritten musical score for the third system of "SCUFFLE". The system consists of five staves. The first staff is labeled "(trps)" and contains a melodic line. The second staff is labeled "(trss)" and contains a harmonic line. The third staff is labeled "(210)" and contains a melodic line. The fourth staff is labeled "(211)" and contains a melodic line. The fifth staff is labeled "(212)" and contains a melodic line. The system concludes with a "Drm. Fill" section.

Handwritten notes: (trps), (trss), (210), (211), (212), (213), Drm. Fill.





## CONDENSED SCORE

## SCUFFLE

Page 18

Handwritten musical score for "SCUFFLE" (Page 18). The score is written on five staves. The first staff is labeled (TAPS) and the second staff is labeled (TAPS) (4). The third staff is labeled (226) (FL/VIBS) and the fourth staff is labeled (227) (228) Sop. (VIBS) (229) (FL/CL). The fifth staff is labeled (W.W'S) (3.4) and (OS). The score includes various musical notations, including notes, rests, and dynamic markings such as *mf*. A bracket labeled "Dm. Fill" spans measures 227 and 228. The score ends with a measure labeled (AL/GTA or TAPT).

Continuation of the handwritten musical score for "SCUFFLE". The first staff is labeled (TAPS) and the second staff is labeled (TAPS). The third staff is labeled (230) (FL/VIBS) and the fourth staff is labeled (231) (W.W'S). The score includes various musical notations, including notes, rests, and dynamic markings such as *mf*. A bracket labeled "Dm. Fill" spans measures 230 and 231. The score ends with a measure labeled "fin".



# ARRANGING CONCEPTS COMPLETE

*This complete text is so comprehensive, that it will become a valued and much-used reference for any arranging library. It is used at North Texas State University, the Dick Grove School of Music and many other schools as a classroom text and is endorsed by Sammy Nestico. Cassette included.*

## PART 1-THE TECHNICAL FOUNDATION

The characteristics and ranges of each instrument in the stage band are covered in detail. A summary of harmony necessary for arranging is included. Covers the rhythmic and melodic aspects of writing and their effect on various musical styles, including jazz, Latin, ballads, rock, etc. In addition, there are Harmonization Tables that enable you to put chords to melody.

## PART 2-MELODIC HANDLING AND VARIATION/ HARMONIC CONSIDERATIONS

Part 2 deals with voice leading, passing chords, modulation, melodic sequence and composing free areas such as introductions, turnarounds and endings. Many examples accompany the detailed text.

## PART 3-HARMONIC DENSITY

This section, the heart of this book, covers voicings and their application to orchestration—from unisons to 8-part harmony. This encyclopedic text includes all tonal and doubled voicings, as well as over 40 pages of concert score examples. The supplementary cassette with recordings of orchestras playing these same examples (so that the student can hear what s/he sees) coordinates with this section.

## PART 4-A WORKING PROCEDURE TO WRITING AN ARRANGEMENT/HOW TO COORDINATE THE INFORMATION TO SPECIFIC MUSICAL STYLES

Begins with a "work procedure"—the detailed, step-by-step process of putting a chart together. Included are orchestration of larger-than-standard sections, as well as orchestration with optional instruments. The last section coordinates ARRANGING CONCEPTS, Parts 1, 2, 3 and 4 in terms of different styles, i.e., jazz, jazz ballads, Latin-jazz, various forms of rock, Broadway, funk, etc. Book concludes with a full-length concert sketch.

## ARRANGING CONCEPTS SUPPLEMENTARY CASSETTE

For easy reference, all recorded examples are coded "sc" in Part 3. On the tape, each recorded example is cross-referenced by number and book page.

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